

HAROLD BERGMAN CO.
2443 PROSPECT AVE. PR-1-5939
CLEVELAND 15, OHIO



**BUILDING
PLUMBING
DRAINAGE
PRODUCTS**

Roof to Basement

This Catalog Contains

Full Data on:

DRAINS

INTERCEPTORS

TRAPS

WALL FIXTURE CARRIERS

WALL CLOSET FITTINGS

HYDRANTS AND STREET WASHERS

SWIMMING POOL EQUIPMENT

Everything for

Building Plumbing Drainage

ENGINEERED PROTECTION FOR

HUMAN HEALTH AND MODERN STRUCTURES

J.A. ZURN MFG. CO.

PLUMBING DIVISION

ERIE, PA., U.S.A.



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BUILDING • PLUMBING • DRAINAGE PRODUCTS

This catalog is intended as a combination price guide and catalog for quick and easy specification reference. It contains complete tables of sizes, weights and dimensions, together with engineering drawings for every item. Plumbing products not shown herein are contained in other Zurn literature, available upon request.

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MEMBER OF PRODUCERS' COUNCIL, INC.

J. A. ZURN MFG. CO.

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FIG. Z-100 ROOF DRAIN, High Velocity Discharge

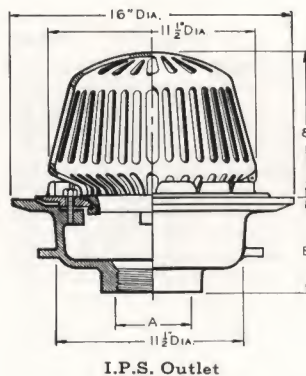
Pipe Size		Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
A	E				
2-3-4"	5 1/4"	\$24.00	\$40.20	\$ 92.20	49
5"	5 1/4"	29.30	48.60	109.10	50
6"	5 1/4"	32.30	54.90	133.40	51
8"	5 1/4"	45.00	74.10	192.50	52

Caulk outlet available, see Z-100A.

Extra large, removable, non-clogging, mushroom dome strainer. Clamping collar of vise construction assures tight joint.

Open Area Ratio of Dome Orifices to Outlet

2"—35:1	4"—9:1	6"—4:1
3"—16:1	5"—6:1	8"—2:1



I.P.S. Outlet



Z-100

Furnished With or Without Anchorage Lugs

FIG. Z-100A ROOF DRAIN, High Velocity Discharge

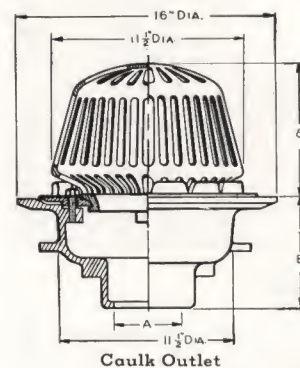
Pipe Size		Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
A	E				
2-3-4"	6 3/4"	\$24.00	\$40.20	\$ 92.20	49
5"	6 3/4"	29.30	48.60	109.10	50
6"	6 3/4"	32.30	54.90	133.40	51
8"	7 3/8"	45.00	74.10	192.50	52

I. P. S. outlet available, see Z-100.

Extra large, removable, non-clogging, mushroom dome strainer.

Open Area Ratio of Dome Orifices to Outlet

2"—35:1	4"—9:1	6"—4:1
3"—16:1	5"—6:1	8"—2:1



Caulk Outlet



Z-100A

Furnished With or Without Anchorage Lugs

FIG. Z-101 ROOF DRAIN, With Seepage Pan, High Velocity Discharge

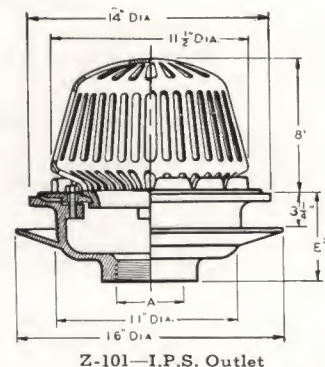
Pipe Size		Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
A	E				
2-3-4"	5 1/4"	\$36.00	\$60.20	\$138.20	55
5"	4 7/8"	41.30	68.40	153.60	56
6"	5"	44.30	74.70	174.70	57
8"	5 1/4"	57.00	94.50	207.40	66

Caulk outlet available; "E" dimension approximately 1 1/2" longer.

Extra large, removable, non-clogging, mushroom dome strainer.

Open Area Ratio of Dome Orifices to Outlet

2"—35:1	4"—9:1	6"—4:1
3"—16:1	5"—6:1	8"—2:1



Z-101—I.P.S. Outlet

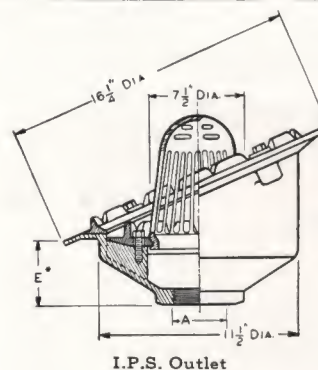
FIG. Z-102 ROOF DRAIN FOR INCLINED ROOF

Pipe Size		Cast Iron Coated (DC)	Galv. (G)	With Bronze Dome Coated (CB)	Galv. (GB)	All Bronze (BR)
A	E					
2-3-4"	3 7/8"	\$31.50	\$49.40	\$42.80	\$60.20	\$127.40
5"	3 7/8"	39.00	60.30	51.00	71.90	152.10
6"	3 7/8"	40.20	68.00	57.40	81.90	187.00

Approx. Wt. Lbs. 2"-3"-4"—43, 5"—44, 6"—45.

Caulk outlet available; "E" dimension approximately 1 1/2" longer.

Standard pitch—22°30'(5" per ft.). Available at different angles according to requirements.



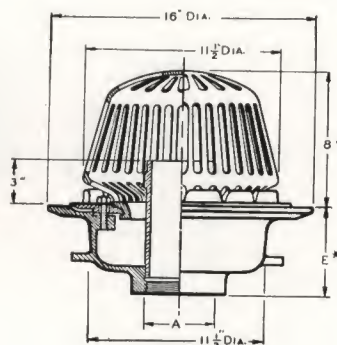
I.P.S. Outlet



Z-102



Z-103



I.P.S. Outlet

Furnished With or Without Anchorage Lugs

ROOF DRAIN**With Adjustable Water Level Regulator, For Water-Insulated Roof****FIG. Z-103**

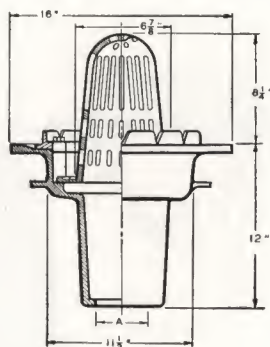
Pipe Size	E	Coated (DC)	Galv. (G)	All Bronze (Br)	Approx. Wt. Lbs.
2"	6 1/4"	\$36.00	\$57.60	\$138.20	61
3"	6 3/8"	39.00	63.00	149.80	63
4"	6 3/8"	42.00	68.40	161.30	64

Caulk outlet available; "E" dimension approximately 1 1/2" longer.

3" water level shown; can be made to specification.
Extra large, removable, non-clogging, mushroom dome strainer.



Z-104-1



Caulk Outlet

Furnished With or Without Anchorage Lugs

ROOF DRAIN With Long Outlet**FIG. Z-104-1**

Pipe Size	Cast Iron		With Bronze Dome		All Bronze (BR)	Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	Coated (CB)	Galv. (GB)		
4"	\$24.00	\$40.20	\$35.30	\$51.20	\$ 92.20	66
5"	29.30	48.60	41.30	60.20	109.10	68
6"	32.30	54.90	46.50	68.70	133.40	70

I. P. S. outlet available.

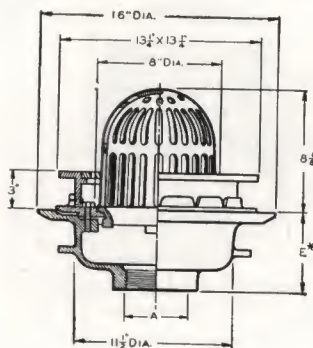
ROOF DRAIN WITH STANDARD LENGTH OUTLET**FIG. Z-104-2**

Pipe Size A	Top of Pan to Outlet
4", 5", 6"	6 5/8"

Fig. Z-104-1 Prices Apply



Z-105



I.P.S. Outlet

Furnished With or Without Anchorage Lugs

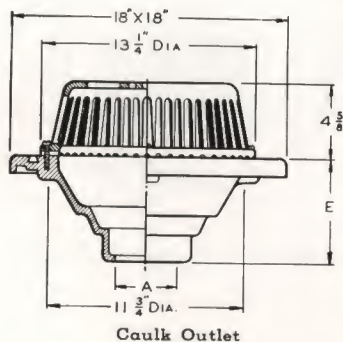
ROOF DRAIN With Tile Frame**FIG. Z-105**

Pipe Size	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4"	5 1/4"	\$33.00	\$52.90	\$106.60	60
5"	5 1/4"	38.30	61.20	123.50	61
6"	5 1/4"	41.30	67.50	147.80	62
8"	5 1/2"	54.00	86.80	206.90	63

Caulk outlet available; "E" dimension approximately 1 1/2" longer.



Z-106



Caulk Outlet

ROOF DRAIN—CAULKED FLASHING TYPE**FIG. Z-106**

Pipe Size	E	Cast Iron		With Bronze Dome		All Bronze (BR)
		Coated (DC)	Galv. (G)	Coated (CB)	Galv. (GB)	
3-4"	6 3/4"	\$32.60	\$51.10	\$43.50	\$63.50	\$ 94.10
5-6"	6 3/4"	35.00	54.00	47.00	66.60	99.80
8"	On request	39.00	60.30	51.50	72.00	104.00

Approx. Wt. Lbs. 3"-4"—56, 5"-6"—58, 8"—60.

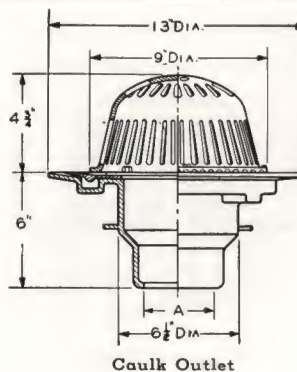
I. P. S. outlet available.

Metal flashing can be bent over and caulked into flashing seat.

FIG. Z-107 ROOF DRAIN—Recessed Clamping Surface Type

Pipe Size A	Cast Iron		With Bronze Dome		All Bronze (BR)	Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	Coated (CB)	Galv. (GB)		
2-3-4"	\$18.50	\$30.20	\$24.40	\$36.90	\$53.80	37

Provides firm anchorage for soft flashing when formed into the recess.



Z-107

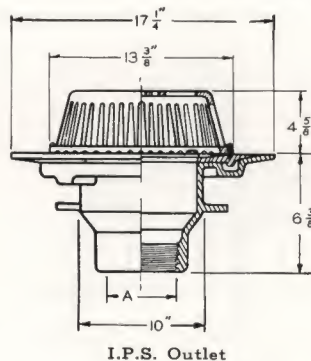
Furnished With or Without Anchorage Lugs

FIG. Z-108 ROOF DRAIN—Recessed Clamping Surface Type

Pipe Size A	Cast Iron		With Bronze Dome		All Bronze (BR)	Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	Coated (CB)	Galv. (GB)		
5"	\$29.30	\$48.60	\$41.30	\$60.20	\$109.10	53
6"	32.30	54.90	46.50	68.70	133.40	54
8"	45.00	74.10	77.30	107.00	192.50	55

Caulk outlet available; outlet approximately 1½" longer.

For same service as Z-107 above.



Z-108

Furnished With or Without Anchorage Lugs

FIG. Z-115 ROOF DRAIN With Side Outlet

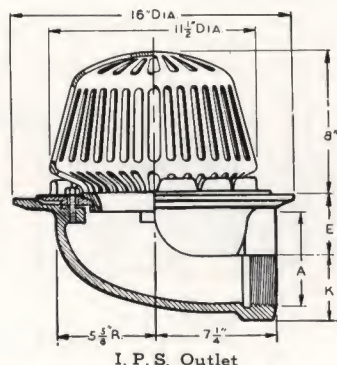
Pipe Size A			Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
	E	K				
2"	6 1/8"	2 3/8"	\$31.50	\$52.80	\$127.40	68
3"	5 5/8"	2 7/8"	31.50	52.80	127.40	69
4"	5 1/16"	3 1/16"	31.50	52.80	127.40	70
5"	4 11/16"	3 13/16"	39.00	65.70	152.10	71
6"	4 5/16"	4 3/16"	43.20	74.50	187.00	72

Caulk Outlet Available.

Extra large, removable, non-clogging, mushroom dome strainer.

Open Area Ratio of Dome Orifices to Outlet

2"—35:1 3"—16:1 4"—9:1 5"—6:1 6"—4:1



Z-115

FIG. Z-118 ROOF DRAIN With Hinged Dome

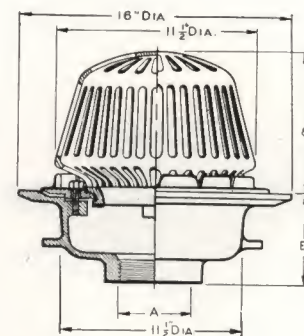
Pipe Size A	E	Coated		Galv.		All Bronze (BR)	Approx. Wt. Lbs.
		Iron Dome	Bronze Dome	Iron Dome	Bronze Dome		
2"	5 1/4"	\$42.00	\$54.00	\$61.20	\$75.60	\$112.00	52
3"	5 1/4"	42.00	54.00	61.20	75.60	112.00	53
4"	5 1/4"	42.00	54.00	61.20	75.60	112.00	54
5"	5 1/4"	57.00	72.00	82.80	100.80	130.70	55
6"	5 1/4"	72.00	90.00	94.40	126.00	183.80	56
Hinged Dome		12.00		25.20		33.60	
Clamping Collar and Retainer		7.50		12.60		19.20	

Caulk outlet available; "E" dimension approximately 1½" longer.

Extra large, hinged, non-clogging, mushroom dome strainer. Hinged dome is easily cleaned; removable if necessary.

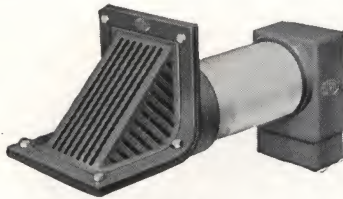
Open Area Ratio of Dome Orifices to Outlet

2"—35:1 3"—16:1 4"—9:1 5"—6:1 6"—4:1

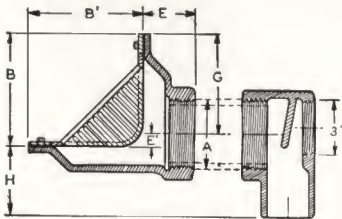


Z-118 I.P.S. Outlet

Furnished With or Without Anchorage Lugs

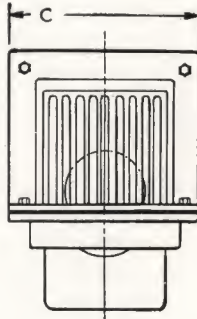


Z-119



45° Oblique Type Strainer

I.P.S. Outlet

**PARAPET SCUPPER ROOF DRAIN** FIG. Z-119
With Downspout Adaptor For Sheet Metal Connection

Pipe Size A	Coated (DC)	Galv. (G)	With Bronze Strainer		All Bronze (BR)
			Coated (CB)	Galv. (GB)	
2-3-4"	\$29.10	\$50.30	\$40.90	\$61.10	\$97.20
4-5-6"	37.00	60.20	55.00	78.60	104.70

Price does not include Downspout Adapter or Nipple.
Add for Downspout Adapter.

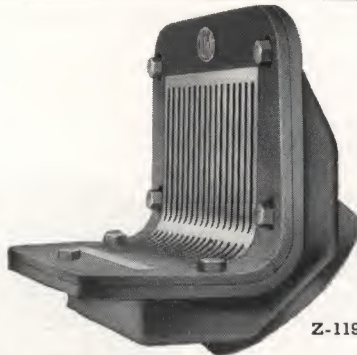
2-3-4"	11.30	19.80	43.20
4-5-6"	14.30	24.30	50.30

Pipe Size A	B	B'	C	E	E'	G	H	Approx. Wt. Lbs.
2"	6 1/4"	6 1/4"	7 1/2"	2 3/4"	- 3/8"	6 5/8"	7"	20
3"	6 1/4"	6 1/4"	7 1/2"	2 3/4"	+ 1/8"	6 1/8"	5 13/16"	20
4"	6 1/4"	6 1/4"	7 1/2"	2 3/4"	+ 5/8"	5 5/8"	4 5/16"	20
4"	8 1/2"	8 1/2"	12 3/4"	3 5/8"	+ 1/8"	8 3/8"	7 3/4"	52
5"	8 1/2"	8 1/2"	12 3/4"	3 5/8"	+ 1/2"	8"	6 3/4"	52
6"	8 1/2"	8 1/2"	12 3/4"	3 5/8"	+ 1 1/8"	7 3/8"	5 11/16"	52

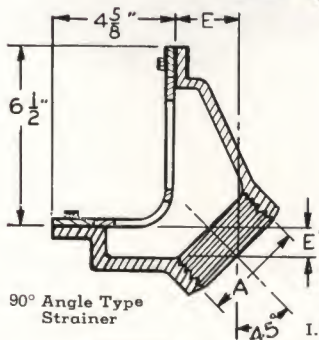
Sheet metal size for 2", 3" and 4" drain—3" x 5"

Sheet metal size for 4", 5" and 6" drain—4" x 6"

Wall thickness determines nipple length. Provides wall outlet roof drainage to exterior downspout conductors. 90° angle type strainer available—see Z-119A below.

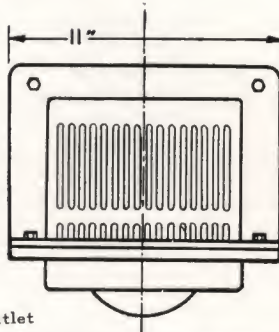


Z-119A



90° Angle Type Strainer

I.P.S. Outlet

**PARAPET SCUPPER ROOF DRAIN With 45° Outlet** FIG. Z-119A

Pipe Size A	Coated (DC)	Galv. (G)	With Bronze Strainer		All Bronze (BR)	Approx. Wt. Lbs.
			Coated (DC)	Galv. (G)		
2-3-4"	\$29.10	\$50.30	\$40.90	\$61.10	\$ 97.20	20
4-5-6"	37.00	60.20	55.00	78.60	104.70	52

Price does not include Downspout Adapter or Nipple.

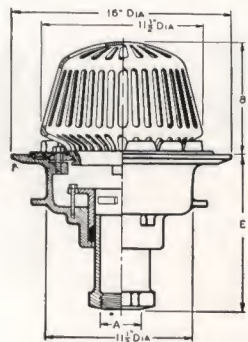
Pipe Size A	E	E'
2"	1"	1 1/8"
3"	1 1/2"	1 3/4"
4"	1 3/4"	1 1/2"
4-5-6"	On request.	

Wall thickness determines nipple length. Provides wall outlet roof drainage to exterior downspout conductors. 45° oblique type strainer available; 90° angle type regularly furnished.



Z-120

Furnished With or Without Anchorage Lugs



I.P.S. Outlet

ROOF DRAIN FIG. Z-120
With Internal Expansion Joint; High Velocity Drainage

Pipe Size A	E		Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
	Min.	Max.				
2"	8 1/4"	10 1/4"	\$36.00	\$ 56.60	\$118.60	55
3"	8 1/4"	10 1/4"	39.00	61.10	125.80	57
4"	8 1/4"	10 1/4"	42.00	65.60	130.60	60
5"	8 1/4"	10 1/4"	50.30	78.30	160.30	63
6"	8 1/4"	10 1/4"	56.30	89.10	191.00	65
8"	8 1/4"	10 1/4"	79.50	124.50	262.10	75

Caulk outlet available.

Integral expansion joint provides adjustable installation and insures flexible expansion on leader lines to compensate for structural or temperature variation. Extra large, removable, non-clogging, mushroom dome strainer.

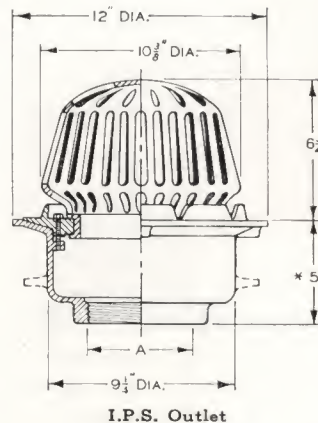
Open Area Ratio of Dome Orifices to Outlet		
2"—35:1	4"—9:1	6"—4:1
3"—16:1	5"—6:1	8"—2:1

FIG. Z-121 ROOF DRAIN

Pipe Size		With Bronze Strainer					
A	E	Coated (DC)	Galv. (G)	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4"	5"	\$18.80	\$29.70	\$27.00	\$38.80	\$ 64.00	22
5"	5"	22.10	33.80	31.50	44.20	74.60	23
6"	5"	25.10	37.40	39.00	56.50	104.00	24

Caulk outlet available; "E" dimension approximately 1½" longer.

For medium and small roof areas.



Z-121

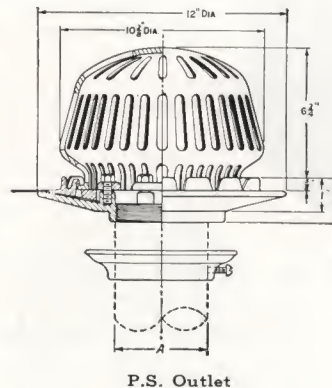
Furnished With or Without Anchorage Lugs

FIG. Z-122 ROOF DRAIN With Anchorage Collar For Steel Deck

Pipe Size		With Bronze Strainer					
A	E	Coated (DC)	Galv. (G)	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4"	1½"	\$16.50	\$27.00	\$24.80	\$36.10	\$57.60	21

Caulk outlet available; outlet approximately 1½" longer.

For prefabricated steel roof decks. Outlet will clear vertical webs on 6" centers. Eliminates cutting of large holes through decking and webs with resultant weakening of roof.



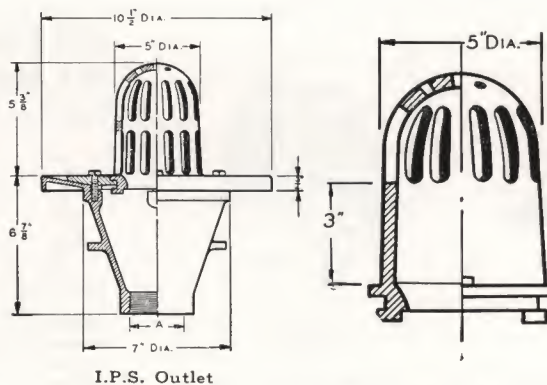
Z-122

FIG. Z-124 ROOF DRAIN With Summer and Winter Type Dome Combination

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4"	\$24.00	\$37.80	\$68.20	20

Caulk outlet available; outlet approximately 1½" longer.

Provides efficient residential drainage with regular dome strainer—use of water level dome provides economical heat resistant facility.

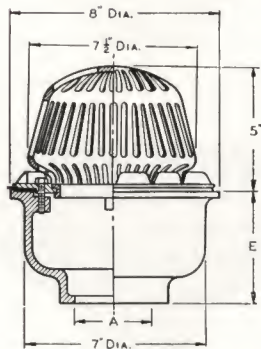


Z-124

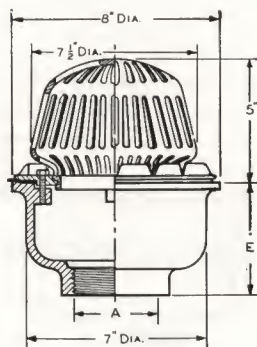
Furnished With or Without Anchorage Lugs



Z-125



Caulk Outlet



I.P.S. Outlet

Furnished With or Without Anchorage Lugs

ROOF OR GUTTER DRAIN

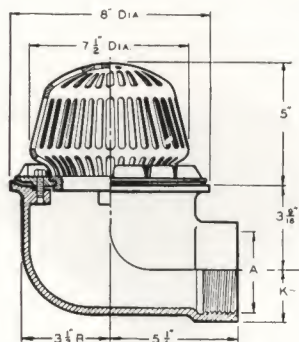
FIG. Z-125

Pipe Size	E (I.P.S.)	E (I.C.)	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4"	4 1/16"	5 5/8"	\$13.50	\$19.80	\$36.00	17
5"	4 3/16"	5 3/8"	15.00	21.60	40.00	18

For narrow valleys and gutters, decks and other small roof areas. Extra large, removable, non-clogging, mushroom dome strainer.

Open Area Ratio of Dome Orifices to Outlet

2" — 11:1	4" — 3:1
3" — 5:1	5" — 2:1



Z-135 I.P.S. Outlet

ROOF OR GUTTER DRAIN With Side Outlet

FIG. Z-135

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
A				
2"	\$18.00	\$25.20	\$48.00	31
3"	18.00	25.20	48.00	32
4"	18.00	25.20	48.00	33
5"	20.30	27.90	54.00	38

Caulk outlet available.

For decks, parapets and other small roof areas. Extra large removable, non-clogging, mushroom dome strainer.

Open Area Ratio of Dome Orifices to Outlet

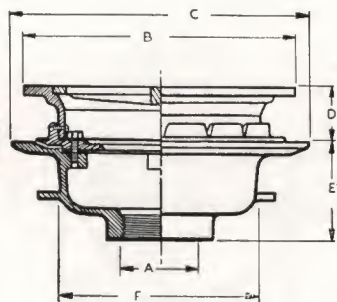
2" — 11:1	3" — 5:1	4" — 3:1	5" — 2:1
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ROOF OR PROMENADE DECK DRAIN

FIG. Z-150



Z-150



I.P.S. Outlet

For flat roof or promenade deck areas.

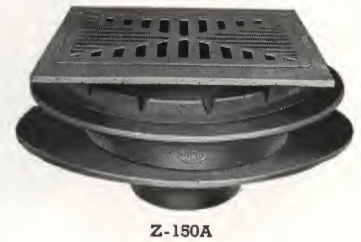
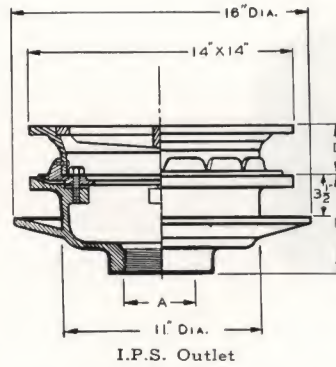
Furnished With or Without Anchorage Lugs

			W/Bronze Frame and Strainer			
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2-3-4"	\$30.00	\$49.80	\$109.40	\$52.20	\$ 72.20	57
5"	36.80	58.70	117.10	58.50	82.10	58
6"	40.50	66.00	140.20	68.30	96.30	59
8"	54.00	84.60	159.40	82.50	116.10	60
Add to (CB) or (GB) Lists for						
Pipe Size	C. P.					W. M.
2-3-4"	\$11.20					\$14.40
5"	12.00					16.00
6-8"	12.80					17.60
Caulk outlet available; "E" dimension approximately 1½" longer.						
Pipe Size	A	B	C	D	E	F
2-3-4"		14x14"	16"	2"	5¼"	11½"
5"		14x14"	16"	2"	5¼"	11½"
6"		14x14"	16"	2"	5¼"	11½"
8"		14x14"	16"	2"	5½"	11½"

FIG. Z-150A ROOF OR DECK DRAIN

Pipe Size			Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB) W/Bronze Frame and Strainer	Galv. (GB)
A	D	E					
2-3-4"	2"	5 1/4"	\$42.00	\$69.60	\$154.20	\$64.20	\$ 92.00
5"	2"	5 1/4"	48.80	78.50	161.90	70.50	101.90
6"	2"	5 1/4"	52.50	85.80	185.00	80.30	116.10
8"	2"	5 1/4"	66.00	104.40	204.20	94.50	135.90
Add to (CB) or (GB) Lists for							
Pipe Size			C. P.			W. M.	
2-3-4"			\$11.20			\$14.40	
5"			12.00			16.00	
6-8"			12.80			17.60	

Caulk outlet available; "E" dimension approximately 1 1/2" longer.
Approx. Wt. Lbs. 2"-3"-4"—60, 5"—61, 6"—62, 8"—63.

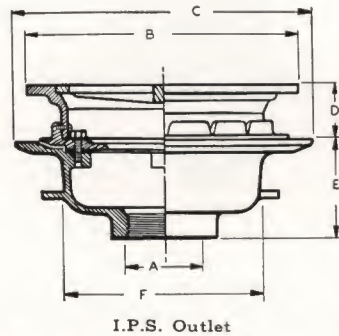


Z-150A

FIG. Z-151 ROOF OR PROMENADE DECK DRAIN

Pipe Size			Coated (DC)	Galv. (G)	Coated (CB) W/Bronze Frame and Strainer	Galv. (GB)	All Bronze (BR)
A							
2-3-4"			\$24.00	\$38.60	\$39.90	\$54.60	\$ 76.00
5"			28.10	43.70	44.70	69.50	83.40
6"			34.40	54.90	56.50	82.80	104.90
Pipe Size							Approx. Wt. Lbs.
A	B	C	D	E	F		
2-3-4"	11x11"	12"	2"	5"	9 1/4"		34
5"	11x11"	12"	2"	4 3/4"	9 1/4"		35
6"	11x11"	12"	2"	5 1/4"	9 1/4"		36

Caulk outlet available; "E" dimension approximately 1 1/2" longer.



Z-151

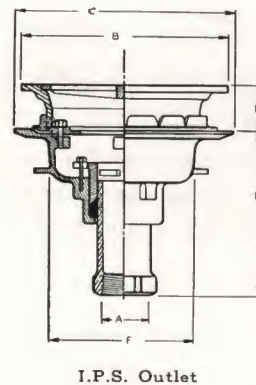
Furnished With or Without Anchorage Lug

FIG. Z-152 ROOF OR PROMENADE DECK DRAIN

					W/Bronze Frame and Strainer		
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.	
A							
2"	\$42.00	\$66.00	\$135.80	\$64.20	\$ 88.40	59	
3"	45.00	70.70	136.60	67.20	92.90	60	
4"	48.00	75.00	141.40	70.20	97.40	61	
5"	57.80	87.80	169.90	79.50	111.80	62	
6"	64.50	100.20	202.60	92.30	130.50	63	
Pipe Size							
A	B	C	D	E	F		
2"	14x14"	16"	2"	8¼"—10¼"	11½"		
3"	14x14"	16"	2"	8¼"—10¼"	11½"		
4"	14x14"	16"	2"	8¼"—10¼"	11½"		
5"	14x14"	16"	2"	8¼"—10¼"	11½"		
6"	14x14"	16"	2"	8¼"—10¼"	11½"		

Caulk outlet available.

For any type roof construction or composition requiring expansion provision in minimum space.



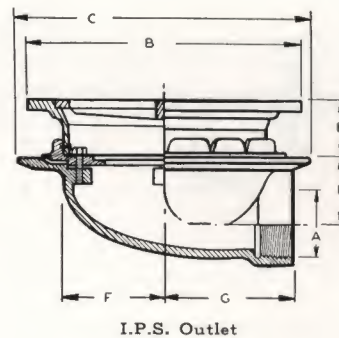
Z-152

Furnished With or Without Anchorage Lugs

FIG. Z-155 ROOF OR PROMENADE DECK DRAIN With Side Outlet

				W/Bronze Frame and Strainer		
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
A						
2"	\$37.50	\$62.40	\$144.60	\$59.70	\$ 85.60	72
3"	37.50	62.40	144.60	59.70	85.60	73
4"	37.50	62.40	144.60	59.70	85.60	74
5"	46.50	75.80	158.10	68.20	99.00	75
6"	50.40	85.60	193.80	79.20	158.30	76
Pipe Size						
A	B	C	D	E	F	G
2"	14x14"	16"	2"	6¾"	5⅝"	7¼"
3"	14x14"	16"	2"	6"	5⅝"	7¼"
4"	14x14"	16"	2"	5⅝"	5⅝"	7¼"
5"	14x14"	16"	2"	5¼"	5⅝"	7¼"
6"	14x14"	16"	2"	4½"	5⅝"	7¼"

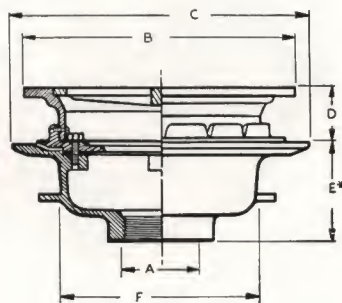
Caulk outlet available.



Z-155



Z-165



I.P.S. Outlet

Furnished With or Without Anchorage Lugs

ROOF OR PROMENADE DECK DRAIN

FIG. Z-165

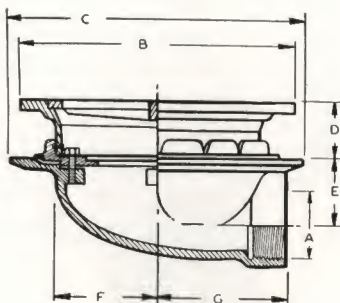
Pipe Size				W/Bronze Frame and Strainer		Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)	
2-3-4"	\$18.00	\$27.00	\$45.60	\$27.80	\$37.20	16
5"	19.50	28.80	49.60	29.60	39.30	17

Pipe Size	B	C	D	E*	F
2"	8x8"	8"	2"	4"	7"
3"	8x8"	8"	2"	4"	7"
4"	8x8"	8"	2"	4 1/8"	7"
5"	8x8"	8"	2"	4 1/4"	7"

Caulk outlet available; "E" dimension approximately 1 1/2" longer.

For small flat roof areas.

ROOF OR PROMENADE DECK DRAIN With Side Outlet FIG. Z-170



Z-170—I.P.S. Outlet

Pipe Size				W/Bronze Frame and Strainer		Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)	
2"	\$22.50	\$32.40	\$57.60	\$32.30	\$42.60	26
3"	22.50	32.40	57.60	32.30	42.60	27
4"	22.50	32.40	57.60	32.30	42.60	28
5"	27.00	39.60	69.60	31.50	43.20	32

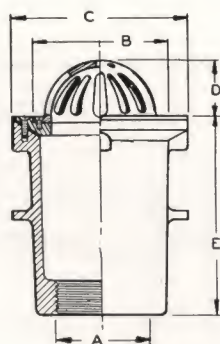
Caulk outlet available.

For small flat roof areas requiring side outlet.

PARAPET OR CORNICE DRAIN With Dome Strainer, FIG. Z-180



Z-180



I.P.S. Outlet

Furnished With or Without Anchorage Lugs

Pipe Size				W/Bronze Collar and Strainer		Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)	
2"	\$14.90	\$20.70	\$24.50			10
3"	16.60	22.80	27.20			14
2"	10.00	13.70	17.50			8
3"	11.80	15.80	20.20			12
2"	7.60	10.20	13.20			4
3"	9.30	12.30	14.90			6

Pipe Size	Add for C. P.	W. M.
2-3"	\$2.80	\$3.50

Caulk Outlet and flat strainer types available. Specify "E" dimension when ordering.

A practical drain for close quarters and out-of-the-way locations.

FIGS. Z-185 & Z-186 CORNICE OR BALCONY DRAIN With Dome Strainer

Pipe Size	W/Bronze Collar and Coated (DC)	Galv. (G)	All Bronze (BR)
2"	\$10.50	\$13.30	\$14.00
3"	14.00	18.90	22.75
4"	17.50	25.20	28.00

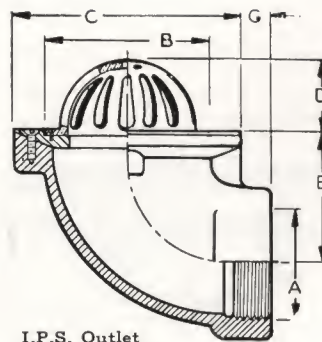
Pipe Size	Add for C. P.	W. M.
2"	\$2.80	\$3.50
3"	4.10	6.20
4"	4.10	6.20

Pipe Size	A	B	C	D	E	G	Approx. Wt. Lbs.
2"	2"	3 3/8"	4 1/2"	1 5/8"	2 1/2"	1 1/2"	5
3"	3"	4 3/4"	6 1/16"	2"	3"	1 1/2"	7
4"	4"	4 3/4"	6 1/16"	2"	3"	5/8"	10

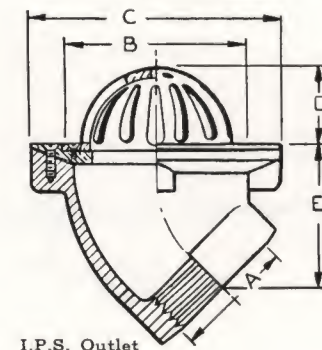
Pipe Size	A	B	C	D	E*	Approx. Wt. Lbs.
2"	2"	3 3/8"	4 1/2"	1 5/8"	4"	5
3"	3"	4 3/4"	6 1/16"	2"	5 1/16"	7
4"	4"	4 3/4"	6 1/16"	2"	5 3/8"	10

Caulk outlet and flat strainer types available

For drainage control on small roof areas.



Z-185



Z-186

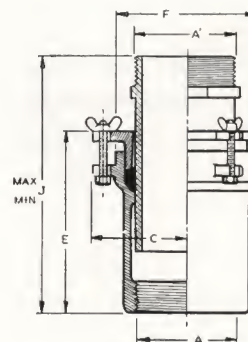
FIG. Z-190 EXPANSION JOINT

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	\$12.00	\$16.20	\$ 26.40	7
3"	15.00	20.70	33.60	10
4"	18.00	25.20	38.40	14
5"	21.00	29.70	52.80	17
6"	24.00	34.20	62.40	21
8"	34.50	50.40	100.80	32

Pipe Size	A'	C	E	F	J	Min.	Max.
2"	2"	2 1/16"	6"	3 5/8"	7 3/4"	7 3/4"	10 3/4"
3"	3"	3 1/4"	6"	4 5/8"	7 3/4"	7 3/4"	10 3/4"
4"	4"	3 3/4"	5 3/4"	5 1/2"	7 1/2"	7 1/2"	10 1/2"
5"	5"	4 1/4"	6"	6 1/2"	7 7/8"	7 7/8"	10 7/8"
6"	6"	5"	6"	7 7/8"	7 7/8"	7 7/8"	10 7/8"
8"	8"	5 15/16"	6"	9 7/8"	7 7/8"	7 7/8"	10 7/8"

Caulk outlet available

Provides for roof or drainage pipe expansion and contraction due to precipitation loads and temperature changes.

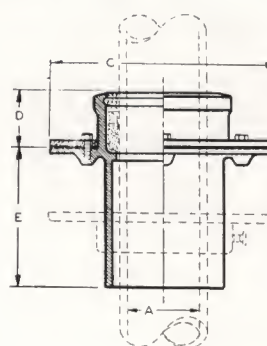


Z-190

FIG. Z-195 VENT STACK FLASHING SLEEVE

Pipe Size	C	D	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1 1/2"-2"	6 1/2"	3"	5"	\$ 8.40	\$ 12.60	\$ 20.40	13
2 1/2"-3"	7 1/2"	3 1/8"	5"	9.60	15.40	28.80	14
4"	8 1/2"	3 1/8"	5"	13.20	20.80	36.00	15
5"	11 1/2"	2 1/2"	6"	16.40	26.20	48.00	22
6"	10 1/2"	3 1/8"	5"	17.80	23.20	52.00	24
8"	14 1/2"	2 7/8"	6"	24.00	37.20	62.00	27
10"	16 3/4"	2 3/4"	6"	48.00	76.80	116.00	36
12"	18 1/2"	2 3/4"	6"	72.00	108.00	160.00	45
Add for bottom roof clamping flange	1 1/2"-3"	4-6"	8-12"	2.00	3.60	5.00	
				4.00	6.00	7.00	
				5.00	8.40	10.00	

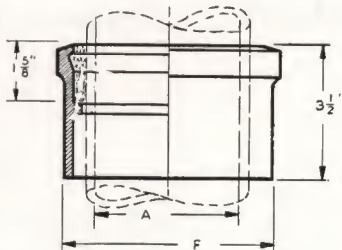
Assures leak-proof vent piping through roof; positive clamping collar.



Z-195



Z-196

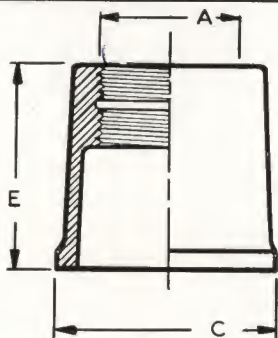


VENT STACK FLASHING SLEEVE (COUNTER FLASHING) FIG. Z-196

Pipe Size		Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
A	F				
1 1/2"	2 5/16"	\$1.10	\$1.70	\$3.20	2
2"	3 1/2"	1.40	2.20	4.30	2 1/2
3"	4 1/8"	2.20	3.40	6.60	3 1/2
4"	5 9/16"	3.20	5.00	9.80	4 1/2
5"	6 1/8"	4.70	7.20	14.00	6
6"	7 1/8"	6.20	9.60	18.90	7 1/2

For Soil or Steel Pipe

Provides tight connection by caulking.



Z-196-3

Pipe Size

A
1 1/2"
2"
3"
4"
5"
6"
8"C
2 3/4"
3 3/4"
4 3/4"
5 7/8"
7"
8"
10 7/8"E
3 5/8"
3 7/8"
4 1/8"
3 5/16"
4"
4 1/2"
5 3/16"Coated (DC)
\$2.00
2.40
3.00
4.20
5.60
7.60
12.00Galv. (G)
\$ 3.60
4.30
5.80
6.70
9.10
13.90
20.40Approx. Wt. Lbs.
2
3
4
6
8
10
21

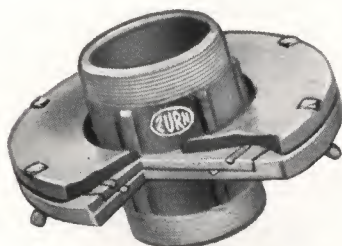
Double thread connections.

VENT FLASHING FITTING

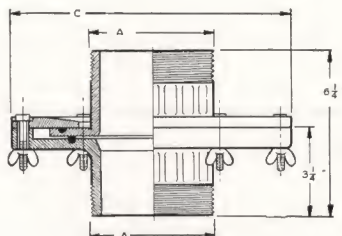
FIG. Z-196-3

HORIZONTAL EXPANSION JOINT

FIG. Z-197



Z-197



Pipe Size

A

C

Max. Offset

Coated (DC)

Galv. (G)

Approx. Wt. Lbs.

2"

8 3/16"

1 1/2"

\$ 32.00

\$ 46.00

35

3"

9 5/16"

1 1/2"

36.50

52.00

38

4"

10 5/16"

1 1/2"

42.00

61.00

41

6"

12 1/2"

1 1/2"

67.00

92.00

45

8"

14 1/2"

1 1/2"

108.00

139.00

50

10"

16 1/2"

1 1/2"

144.00

192.00

59

Provides for horizontal expansion and for offset connections.

ROOF DRAIN PARTS

FIGS. Z-100 TO Z-115 DOMES

Pipe Size	Coated	Galv.	All Bronze	Add for
2-3-4"	\$ 9.00	\$13.50	\$21.60	Polish \$ 9.60
5"	9.80	14.60	23.20	Bronze 9.60
6"	10.50	15.90	26.40	Domes 9.60
8"	17.30	26.70	52.80	

FIGS. Z-125 TO Z-135 DOMES

2-3-4-5"	\$ 4.50	\$ 6.90	\$12.00	\$ 6.40
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FIGS. Z-150 TO Z-155 FLAT STRAINERS

Pipe Size	Coated	Galv.	All Bronze
2-3-4"	\$ 4.50	\$ 7.20	\$ 9.60
5"	5.30	8.10	10.40
6"	6.00	9.90	12.80
8"	6.80	10.80	15.30

FIGS. Z-165 TO Z-170

2-3-4-5"	\$ 4.30	\$ 6.50	\$10.00
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FIGS. Z-105 STRAINER RINGS

All Sizes	Coated	Galv.	All Bronze
	\$ 1.80	\$ 2.70	\$ 4.00

BRASS CLAMPING BOLTS..... \$.70

FIGS. Z-100 TO Z-115 AND Z-150 TO Z-155

CLAMPING COLLARS

Pipe Size	Coated	Galv.	All Bronze
2-3-4"	\$ 4.50	\$ 7.20	\$ 9.60
5"	5.00	7.90	10.60
6"	5.40	8.60	12.50
8"	6.80	10.80	14.40

FIGS. Z-125 TO Z-135 AND Z-165 TO Z-170

CLAMPING COLLARS

2-3-4-5"	\$ 1.50	\$ 2.30	\$ 4.00
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For polished bronze clamping collars add 50%

FIGS. Z-105 AND Z-150 TO Z-155 TILE FRAMES

Pipe Size	Coated	Galv.	All Bronze
2-3-4"	\$ 9.00	\$12.60	\$24.00
5"	10.50	15.70	25.90
6"	11.30	16.70	27.20
8"	18.00	24.80	38.40

FIGS. Z-130 AND Z-165 TO Z-170

2-3-4-5"	\$ 6.30	\$ 7.90	\$10.40
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FIGS. Z-130 STRAINER RINGS

All Sizes	\$ 1.40	\$ 2.20	\$ 3.20
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FLOOR OR SHOWER DRAINS . . . Pages 14 to 22

FIGS. Z-200 AND Z-210 FLOOR OR SHOWER DRAIN

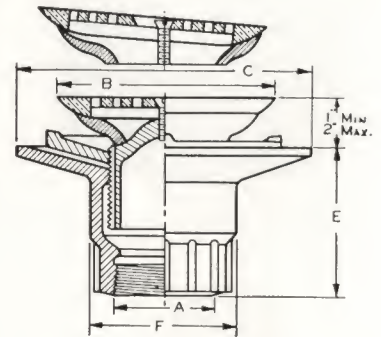
Pipe Size			E	E		Coated	Galv.	All Bronze	Chrome	Approx.
A	B-Dia.	C	Caulk	I.P.S.	F	(DC)	(G)	(BR)	Str. add	Wt. Lbs.
2"	4"	7"	3 3/4"	3 1/2"	3 3/4"	\$11.30	\$16.20	\$22.40	\$1.60	12
2"	5"	7"	3 3/4"	3 1/2"	3 3/4"	12.80	18.00	24.00	2.10	13
3"	5"	9"	4"	3 5/8"	4 3/4"	15.00	21.60	28.00	2.10	15
3"	6"	9"	4"	3 5/8"	4 3/4"	17.30	24.30	30.40	2.60	16
3"	7"	9"	4"	3 5/8"	4 3/4"	21.00	28.80	34.40	3.70	17
4"	5"	9"	4"	3 5/8"	5 5/8"	16.50	24.30	30.40	2.10	16
4"	6"	9"	4"	3 5/8"	5 5/8"	18.80	27.00	32.80	2.60	17
4"	7"	9"	4"	3 5/8"	5 5/8"	22.50	31.50	36.80	3.70	18
Deduct for clamp collar						1.50	2.70	4.00		

**Recommended sizes

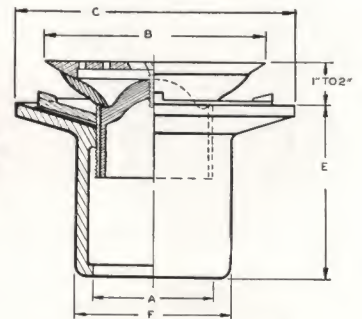
Strainer adjustable to plane of floor assuring smooth finish. Non-clogging seepage slots in flashing collar and in vertically adjustable head.



Z-200



Z-200—I. P. S. Outlet



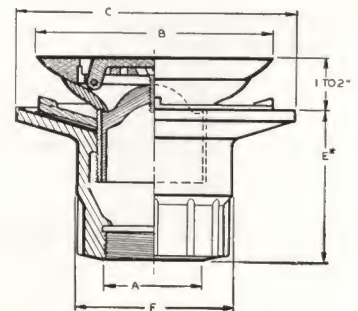
Z-210—Caulk Outlet

FIG. Z-220 FLOOR DRAIN With Solid Hinged Cover

Pipe Size	A	B-Dia.	C	E*	F	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs
1½-2"	5"	7"	3½"	3¾"	\$18.80	\$25.20	\$30.40	\$2.10	12	
3"	5"	9"	3⅝"	4¾"	21.00	28.80	34.40	2.10	14	
3"	7"	9"	3⅝"	4¾"	30.00	39.60	44.00	3.70	16	
4"	7"	9"	3⅝"	5⅝"	31.50	42.30	46.40	3.70	17	
Deduct for clamp collar						1.50	2.70	4.00		

Caulk outlet available; "E" dimension approximately 1 1/2" longer.

Strainer provided with solid hinged cover to be used when strainer is not in operation. Provides finished appearance in exposed locations.



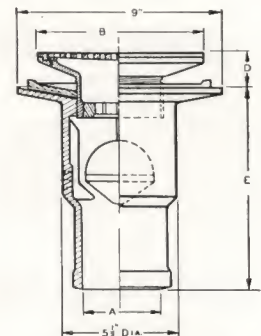
Z-220—I. P. S. Outlet

FIG. Z-230 FLOOR DRAIN With Automatic Back Pressure Device

Pipe Size	A	B-Dia.	D	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs.
2"	5"	5 ⁵ / ₈ "	1 ³ / ₈ "	7 ¹ / ₈ "	\$26.30	\$36.00	\$44.80	\$ 2.10	24
3"	6"	1"	2"	8 ¹ / ₈ "	27.80	37.80	48.80	2.60	25
4"	7"	1"	2"	8 ¹ / ₈ "	29.30	39.60	52.80	3.70	26
Deduct for clamping collar					1.50	2.70	4.00		

I. P. S. outlet available.

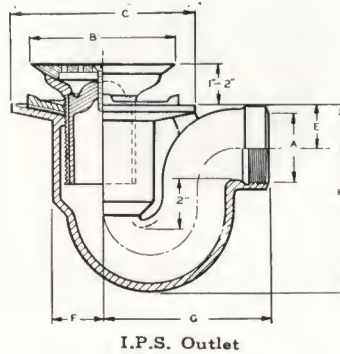
For control of backwater from other fixtures or street sewers. Strainer head adjustable to finished floor level.



Z-230—Caulk Outlet



Z-250



FLOOR OR SHOWER DRAIN With Integral Trap

FIG. Z-250

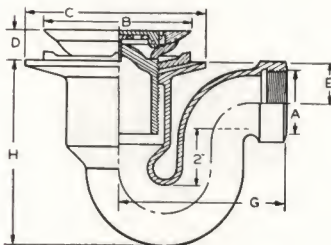
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs.
1 1/2"-2"	\$19.50	\$29.70	\$51.20	\$1.60	16
1 1/2"-2"	21.00	31.50	52.80	2.10	17
3"	27.00	40.50	69.90	2.10	24
3"	29.30	43.20	72.30	2.60	25
3"	33.00	47.70	76.30	3.70	26
4"	33.80	52.20	94.90	2.10	31
4"	36.00	54.90	97.30	2.60	32
4"	39.80	59.40	101.30	3.70	33

Deduct for clamp collar 1.50 2.70 4.00

Pipe Size	B-Dia.	C	E	F	G	H
1 1/2"-2"	4"	7"	1 1/2"	1 3/4"	6 1/8"	6 3/4"
1 1/2"-2"	5"	7"	1 1/2"	1 3/4"	6 1/8"	6 3/4"
3"	5"	9"	2 1/8"	2 5/16"	8 1/8"	9"
3"	6"	9"	2 1/8"	2 5/16"	8 1/8"	9"
3"	7"	9"	2 1/8"	2 5/16"	8 1/8"	9"
4"	5"	9"	2 3/4"	2 5/16"	8"	9"
4"	6"	9"	2 3/4"	2 5/16"	8"	9"
4"	7"	9"	2 3/4"	2 5/16"	8"	9"

**Recommended sizes
Caulk outlet available.

Strainer adjustable to plane of floor—see Fig. Z-200—assuring smooth finish. Non-clogging seepage slots in flashing collar and in vertically adjustable head.



Z-265—I.P.S. Outlet

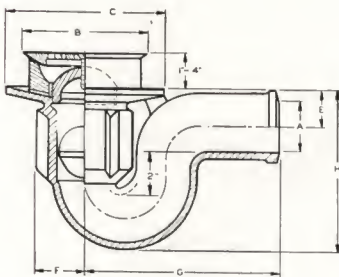
FLOOR DRAIN With Solid Hinged Cover and Integral Trap

FIG. Z-265

Pipe Size	B-Dia.	C	D	E	G	H	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs.
1 1/2"-2"	5"	7"	1"-2"	1 1/2"	6 1/8"	6 3/4"	\$27.00	\$38.70	\$59.20	\$2.10	17
3"	5"	9"	1"-2"	2 1/8"	8 1/8"	9"	33.00	47.70	75.30	2.10	25
3"	7"	9"	1"-2"	2 1/8"	8 1/8"	9"	42.00	58.50	85.90	3.70	27
4"	7"	9"	1"-2"	2 3/4"	8"	9"	48.80	70.20	110.90	3.70	33

Deduct for clamp collar 1.50 2.70 4.00
Caulk outlet available.

Strainer provided with solid hinged cover to be used when strainer is not in operation. Provides finished appearance in exposed locations.



Z-270—Caulk Outlet

FLOOR DRAIN With Automatic Back Pressure Device and Integral Trap

FIG. Z-270

Pipe Size	B-Dia.	C	E	F	G	H	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs.
2"	5"	7"	1 1/2"	1 3/16"	9"	6 3/4"	\$27.00	\$37.80	\$56.80	\$2.10	14
3"	5"	9"	2 1/8"	2 5/8"	11"	9"	33.00	46.80	72.90	2.10	21
3"	7"	9"	2 1/8"	2 5/8"	11"	9"	39.00	54.00	80.30	3.70	23
4"	7"	9"	2 3/4"	2 5/8"	11"	9"	45.80	66.60	107.70	3.70	30

Deduct for less back pressure device 2-3"—\$4.80 4"—\$6.40
I. P. S. outlet available.

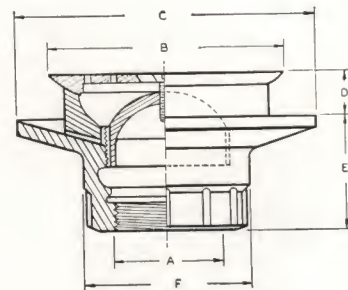
For control of backwater from other fixtures or street sewers. Strainer adjustable to plane of floor—see Fig. Z-200.

FIG. Z-280 FLOOR DRAIN

Pipe Size						Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
A	B-Dia.	C	D	E	F				
1½-2"	5"	7"	1"-4"	2½"	3¾"	\$ 9.80	\$13.20	\$16.30	8
3"	5"	9"	1"-4"	2¾"	4¾"	11.60	16.20	20.40	15
3"	7"	9"	1"-4"	2¾"	4¾"	17.60	23.40	26.10	16
4"	7"	9"	1"-4"	2¾"	5⅝"	18.80	25.60	28.20	17
Str. rest 3" high add						1.50	2.20	2.90	
Str. rest 4" high add						2.10	2.90	3.50	

Str. rest 3" high add
Str. rest 4" high add

Strainer adjustable to plane of floor—see Fig. Z-200.



Z-280—I.P.S. Outlet

FIG. Z-300 "THOROFLUSH" FLOOR DRAIN With Side Outlet

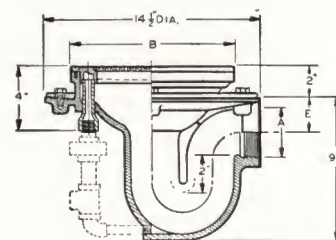
Pipe Size			Pol. Bronze Coated (DC)	Grate Galv. (G)	All Bronze (BR)	C. P. Add	W. M. Add	Approx. Wt. Lbs.
A	B.Dia.	E						
2-3"	11"	2½"	\$66.00	\$93.50	\$142.40	\$11.20	\$14.40	50
2-3"	12"x12"	2½"	83.00	116.30	176.40	12.80	19.20	52
Clamp collar, deduct			6.00	9.00	12.80			

Clamp collar, deduct

Removable plug or stopper in strainer add **\$7.20**

Caulk outlet available.

Water pressure flushing provides for sanitary washing of drain interior.
Recommended for hospitals.



Z-300—I.P.S. Outlet

FIG. Z-310 "THOROFLUSH" FLOOR DRAIN WITH POL. BRONZE HINGED GRATE

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	C. P. Add	W. M. Add	Approx. Wt. Lbs.
2-3"	\$54.00	\$75.30	\$111.70	\$11.20	\$14.40	18
2-3"	65.80	95.30	133.60	12.80	19.20	20
Clamp collar, deduct	6.00	9.00	12.80			

Clamp collar, deduct

Removable plug or stopper in strainer add **\$7.20**

Pipe Size	
A	B-Dia.
2-3"	11"
2-3"	12" x 12"

Caulk outlet available; outlet dimension approximately 1 1/2" longer.

Water pressure flushing provides for sanitary washing of drain interior. Recommended for hospitals.



Z-310—I.P.S. Outlet

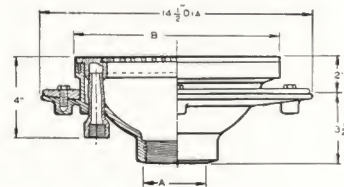


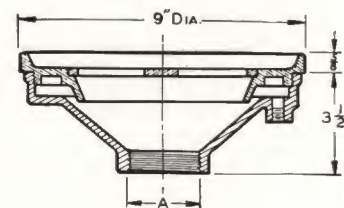
FIG. Z-320 REFRIGERATOR FLOOR DRAIN With Flushing Connection

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1-2"	\$18.80	\$25.70	\$38.40	15

Chrome plated rim and strainer add \$4.80

White metal rim and strainer add \$9.60

Flushing connection guards against contamination from melted ice water residues.



Z-320—I.P.S. Outlet

STRAINER HEADS FOR FLOOR OR SHOWER DRAINS

INTERCHANGEABLE

ALL I.P.S. STANDARD THREADS



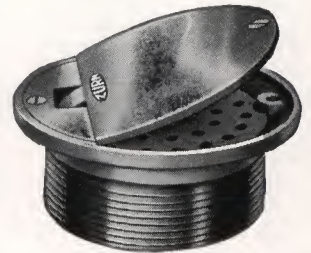
Standard Round—Slotted
Type "A"



Standard Round—Square
Perforations
Type "B"



Standard Round—with Hinged
Strainer, Full Slotted
Type "C"



Standard Round—with Solid Top
Hinged with Recessed Strainer
Type "D"



Standard Round—with Anchoring
Lugs and Slotted Strainer
Type "E"



Standard Round—with Adjustable
Sleeve and Slotted Strainer
Type "F"

STRAINER HEADS For Floor or Shower Drains

Types "A" "B" and "F" (2" Length) Standard Round

Top Diam.	I.P.S. Th'd Size	Pol. Bronze	C. P. Add	W. M. Add	Approx. Wt. Lbs.
4"	2"	\$ 4.80	\$ 1.60	\$ 2.40	1
4 1/2"	2"	5.60	1.80	2.80	1 1/2
5"	3 1/2"	6.40	2.10	3.20	2
6"	3 1/2"	8.80	2.60	4.40	3
7"	3 1/2"	12.80	3.70	6.40	4 1/2
8"	3 1/2-5"	14.40	4.80	7.20	5
10"	3 1/2-5"	20.80	8.00	10.40	11
12"	3 1/2-5"	28.80	11.20	14.40	17



Standard Square—Slotted
Type "H"



Standard Square—with Anchoring
Lugs and Slotted Strainer
Type "I"

Type "H"—Standard Square

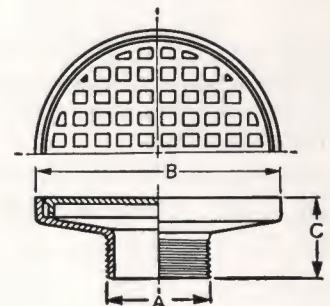
Top Dim.	I.P.S. Th'd Size	Pol. Bronze	C. P. Add	W. M. Add	Approx. Wt. Lbs.
4"	2"	\$ 6.00	\$ 2.00	\$ 3.00	2
4 1/2"	2"	6.90	2.30	3.40	2 1/2
5"	3 1/2"	8.00	2.60	4.00	3
6"	3 1/2"	11.00	3.20	5.60	4 1/2
7"	3 1/2"	16.00	4.60	8.00	5
8"	3 1/2"	18.00	6.00	9.00	6
10"	3 1/2"	26.00	10.00	13.00	12
12"	3 1/2"	36.00	14.00	18.00	18

TYPES "K" and "L" ANGLE SHOWER STRAINER, 90° Male or Female, I.P.S.

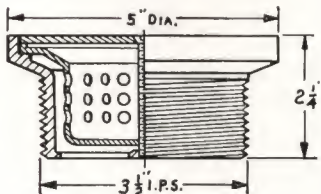
Strainer Size	Pipe Size	Pol. Bronze	C. P. Top	W. M. Top	Approx. Wt. Lbs.
3 1/2x3 1/2x4 1/2"—C. I. Body	3 1/2"	\$10.40	\$15.20	\$17.60	8
6 1/2x6 1/2x7"—C. I. Body	3 1/2"	20.80	30.40	35.20	15
3 1/2x3 1/2x4 1/2"—Bronze Body	3 1/2"	14.40	19.20	21.60	9
6 1/2x6 1/2x7"—Bronze Body	3 1/2"	28.80	38.40	43.20	16

TYPE "G"—DOME OR BEEHIVE

Size Diam.	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
4"	\$ 6.40	\$ 8.60	\$ 9.60	1 1/2
4 1/2"	7.40	9.80	11.30	2
5"	8.60	11.30	12.90	2 1/2
6"	11.80	15.10	17.60	3 1/2



Type "N"



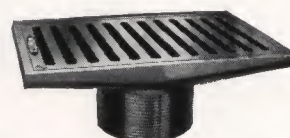
Round—Basket Strainer
Type "M"



90° Male I.P.S.
Type "K"



Beehive Dome Strainer
Type "G"



Rectangular—Full Slotted
Type "J"



90° Female I.P.S.
Type "L"

Continued on Following Page

TYPE "C"—HINGED TOP

Size Diam.	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
4"	\$ 8.00	\$ 9.60	\$10.40	1
4½"	8.80	10.60	11.60	1½
5"	9.60	11.70	12.80	2
6"	12.00	14.60	16.40	3
7"	16.00	19.80	22.40	4½
8"	17.60	22.40	24.80	5

TYPE "D"—SOLID HINGED TOP With Secondary Strainer

Size Diam.	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
5"	\$12.80	\$15.90	\$17.60	3
6"	16.40	20.20	23.00	4
7"	22.40	28.20	32.00	5½
8"	24.80	32.00	35.60	6

Type "I"—Add 30% to Type "H" prices—see page 17.

Type "E"—Add 30% to Type "A" prices—see page 17.

Drains or parts of Everdur Metal, Monel Metal, Malleable Iron or Cast Steel—Prices on Application.

Concave or Convex Strainer, add 25%.

Hinged Strainer Square, add to Type "C" \$4.80.

Adjustable Sleeves longer than 2"—see Type "F", prices on application.

Bronze Extension Pieces, prices on application.

All Standard Strainer Heads have a maximum adjustment on threaded shank of 1¼"-1½" depending on drain size.

TYPE "J"—RECTANGULAR

Size Top	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
4½x8"	\$18.40	\$21.60	\$27.60	4
5x9"	20.00	23.20	30.00	5
5x17"	27.20	35.20	40.80	13½

TYPE "M"—ROUND With Basket Strainer

Size Diam.	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
5"	\$10.70	\$13.20	\$16.10	4

TYPE "N"—ROUND With Tractor Type Strainer

Size Diam.	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
7"	\$16.60	\$20.50	\$25.10	8
9"	25.00	31.40	37.40	12

FIG. Z-400 SHOWER DRAIN With Angle Strainer

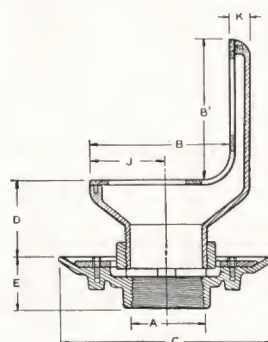
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
A				
1½-2"	\$20.80	\$26.00	\$32.00	10
1½-2"	35.20	40.40	46.40	24
3"	22.60	31.40	36.00	11
3"	37.00	45.80	50.40	25
4"	38.40	47.70	52.80	26

Deduct for clamp collar 1.50

Pipe Size	B	B'	C	D	E	J	K
A				Min. Max.			
1½-2"	3½"	3½"	7½"	1½"-2½"	1¾"	2½"	¾"
1½-2"	6½"	6½"	9½"	3"-4"	2½"	3½"	1"
3"	3½"	3½"	7½"	1½"-2½"	1¾"	2½"	¾"
3"	6½"	6½"	9½"	3"-4"	2½"	3½"	1"
4"	6½"	6½"	9½"	3"-4"	2½"	3½"	1"

Caulk outlet available; "E" dimension approximately 1½" longer.

Floor and wall drainage. Prevents flooding due to paper or towels on strainer. Strainer adjustable to finished floor.



I.P.S. Outlet



Z-400

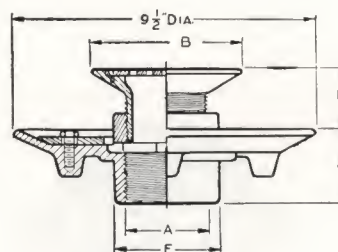
FIG. Z-405 FLOOR OR SHOWER DRAIN

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. Add	Approx. Wt. Lbs.
A					
1½-2"	\$11.30	\$16.20	\$22.40	\$1.60	10
1½-2"	12.80	18.00	24.00	2.10	11
3"	14.60	23.40	28.00	2.10	11
3"	17.00	25.80	30.40	2.60	12
3"	21.00	29.80	34.40	3.70	13
4"	18.40	27.70	32.80	2.60	12
4"	22.40	31.70	36.80	3.70	13
4"	24.00	33.30	38.40	4.80	14
5"	28.70	36.00	43.40	4.80	16
6"	31.20	40.00	48.40	4.80	17

Deduct for clamp collar 1.50

Pipe Size	B-Dia.	D	E	F
A		Min.—Max.		
1½-2"	4"	1"-2"	2½"	2¾"
1½-2"	5"	1¼"-2¼"	2½"	2¾"
3"	5"	1¼"-2¼"	2¾"	4"
3"	6"	1¼"-2¼"	2¾"	4"
3"	7"	1½"-3"	2¾"	4"
4"	6"	1¼"-2¼"	2¾"	5"
4"	7"	1¼"-2¼"	2¾"	5"
4"	8"	1½"-3"	2¾"	5"
5"	8"	1½"-3"	2¾"	6¼"
6"	8"	1½"-3"	2¾"	7¼"

**Recommended sizes



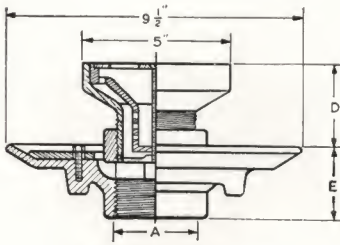
I.P.S. Outlet



Z-405

Provides positive seepage control. Strainer adjustable to floor level.

FLOOR OR SHOWER DRAIN, Adjustable Head, Basket Strainer Type FIG. Z-405-5



Z-405-5—I.P.S. Outlet

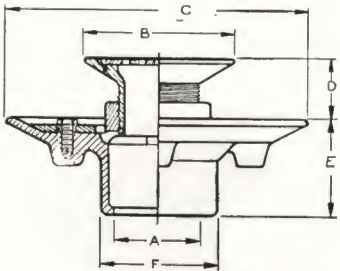
Pipe Size A	D		Diam. Str.	Cast Iron W/Pol. Str.			Add for C. P.	W. M.	Approx. Wt. Lbs.
	Min.—Max.	E		Coated (DC)	Galv. (G)	All Bronze (BR)			
1½-2"	1¼"—2½"	2½"	5"	\$17.10	\$22.30	\$28.30	\$2.50	\$5.40	13
3"	1¼"—2½"	2½"	5"	18.90	27.70	32.30	2.50	5.40	14
4"	1¼"—2½"	2½"	5"	20.30	29.60	34.70	2.50	5.40	15
Deduct for clamping collar				1.50	2.70	4.00			

Caulk outlet available; "E" dimension approximately 1½" longer.

Removable interior basket strainer keeps lines clean.

FLOOR OR SHOWER DRAIN

FIG. Z-415



Z-415—Caulk Outlet

Pipe Size A	B-Dia.	C	D Min.—Max.	E	F	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Str. add	Approx. Wt. Lbs.
2"	4"	9½"	1" —2"	3⅝"	3½"	\$11.30	\$16.20	\$22.40	\$1.60	11
2"	5"	9½"	1¼"—2¼"	3⅝"	3½"	12.80	18.00	24.00	2.10	12
3"	5"	9½"	1¼"—2¼"	3⅝"	4⅝"	14.60	23.40	28.00	2.10	12
3"	6"	9½"	1¼"—2¼"	3⅝"	4⅝"	17.00	25.80	30.40	2.60	13
3"	7"	9½"	1½"—3"	3⅝"	4⅝"	21.00	29.80	34.40	3.70	14
4"	6"	10"	1¼"—2¼"	3⅝"	5¼"	18.40	27.70	32.80	2.60	14
4"	7"	10"	1¼"—2¼"	3⅝"	5¼"	22.40	31.70	36.80	3.70	15
4"	8"	10"	1½"—3"	3⅝"	5¼"	24.00	33.30	38.40	4.80	16

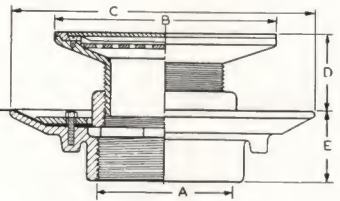
**Recommended sizes
Deduct for clamp collar

1.50 2.70 4.00

Provides positive seepage control. Strainer adjustable to floor level.

FLOOR DRAIN With Solid Hinged Cover

FIG. Z-420



Z-420—I.P.S. Outlet

Pipe Size A	B-Dia.	C	D Min.—Max.	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Top add	Approx. Wt. Lbs.
1½-2"	5"	9½"	1¼"—2¼"	2½"	\$19.20	\$24.40	\$30.40	\$3.10	12
3"	5"	9½"	1¼"—3"	2½"	21.00	29.80	34.40	3.10	13
3"	7"	9½"	1½"—3"	2½"	30.60	39.40	44.00	5.80	16
4"	7"	9½"	1½"—3"	2½"	32.00	41.30	46.40	5.80	17

Deduct for clamp collar
Caulk outlet available; "E" dimension approximately 1½" longer.

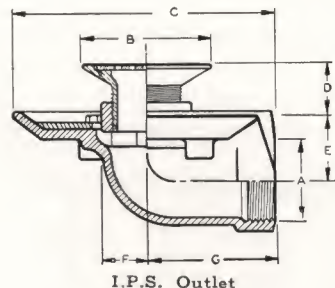
Strainer provided with solid hinged cover to be used when strainer is not in operation.

FLOOR DRAIN With Side Outlet

FIG. Z-430



Z-430



I.P.S. Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Add for C. P.	Approx. Wt. Lbs.
1½-2"	\$13.60	\$19.80	\$27.20	\$1.60	12
1½-2"	15.10	21.60	28.80	2.10	13
3"	17.60	27.90	36.00	2.10	14
3"	20.00	30.30	38.40	2.60	15
3"	24.00	34.30	42.40	3.70	16

Deduct for clamp collar 1.50 2.70 4.00

Pipe Size A	B-Dia.	C	D Min.—Max.	E	F	G
1½-2"	4"	7½"	1½"—2¼"	2¼"	1⅝"	3⅝"
1½-2"	5"	7½"	1½"—2¼"	2¼"	1⅝"	3⅝"
3"	5"	9½"	1½"—2¼"	3⅝"	2¼"	4⅝"
3"	6"	9½"	1½"—2¼"	3⅝"	2¼"	4⅝"
3"	7"	9½"	1½"—3"	3⅝"	2¼"	4⅝"

**Recommended sizes
Caulk spigot outlet available.

Side outlet for shallow floor space. Provides positive seepage control. Strainer adjustable to floor level.

FIG. Z-440 PRISON CELL DRAIN

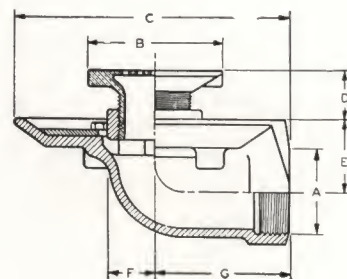
Pipe Size	A	B-Dia.	C	D Min.—Max.	E	F	G	Coated (DC)	Galv. (G)	All Bronze (BR)	Add for C. P.	Approx. Wt. Lbs.
1½"-2"	4"	7½"	1½"-2¼"	2¼"	1¾"	3¾"		\$16.60	\$22.80	\$30.20	\$1.60	12
1½"-2"	5"	7½"	1½"-2¼"	2¼"	1¾"	3¾"		18.90	25.40	32.60	2.10	13
3"	5"	9½"	1½"-2¼"	3½"	2¼"	4¾"		21.40	31.70	39.80	2.10	14
3"	6"	9½"	1½"-2¼"	3½"	2¼"	4¾"		25.20	35.50	43.60	2.60	15
3"	7"	9½"	1½"-3"	3½"	2¼"	4¾"		32.30	42.60	50.70	3.70	16
Deduct for clamp collar								1.50	2.70	4.00		

Deduct for clamp collar

**Recommended sizes

Caulk outlet available.

Strainer provided with anchorage lugs. Top strainer integrally cast to strainer head to prevent its removal.



Z-440—I.P.S. Outlet

FIG. Z-450 FLOOR OR SHOWER DRAIN With Integral Trap (Drum Type)

Pipe Size	A	B-Dia.	D Min.—Max.	E	Coated (DC)	Galv. (G)	All Bronze (BR)
1½"-2"	4"	1¼"-2¼"	2½"		\$19.50	\$29.70	\$51.20
1½"-2"	5"	1¼"-2¼"	2½"		21.00	31.50	52.80
3"	5"	1¼"-2¼"	2"		26.60	41.30	69.90
3"	6"	1¼"-2¼"	2"		29.00	43.70	72.30
3"	7"	1¼"-2¼"	2"		33.00	47.70	76.30
4"	6"	1¼"-2¼"	2½"		35.70	55.60	97.30
4"	7"	1¼"-2¼"	2½"		39.70	59.60	101.30
4"	8"	1¼"-2¼"	2½"		41.30	61.20	102.90

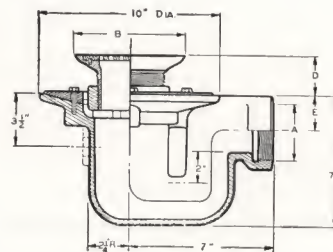
Deduct for clamp collar

Approx. Wt. Lbs. 1½"-2"—17, 18, 3"—30, 31, 32, 4"—31, 32, 33.

**Recommended sizes

Caulk outlet available.

Provides positive seepage control. Strainer adjustable to floor level.



I.P.S. Outlet



Z-450

FIG. Z-450-5 FLOOR OR SHOWER DRAIN With Integral Trap (Drum Type), Adjustable Head, Basket Strainer Type

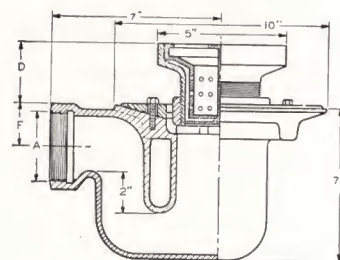
Pipe Size	A	D Min.—Max.	Diam. Strainer	F	Cast Iron with Polished Strainer		All Bronze (BR)	Approx. Wt. Lbs.
					Coated (DC)	Galv. (G)		
1½"-2"	1¼"-2½"	5"	2½"		\$25.30	\$35.80	\$57.10	32
3"	1¼"-2½"	5"	2"		30.90	45.60	74.20	33
4"	1¼"-2½"	5"	2½"		37.60	57.50	99.20	34
Deduct for clamp collar					1.50	2.70	4.00	

Add for Chrome Plate Top

Add for White Metal Top

Caulk outlet available.

Removable interior basket strainer keeps lines clean.



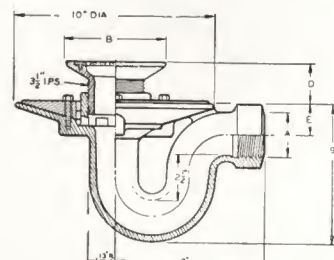
Z-450-5—I.P.S. Outlet

FIG. Z-453 FLOOR OR SHOWER DRAIN With Integral Trap (Uniform Diameter Type)

Pipe Size	A	B-Dia.	D Min.—Max.	F	Coated (DC)	Galv. (G)	All Bronze (BR)	Add for C. P.	W. M.	Approx. Wt. Lbs.
1½"-2"	5"	1¼"-2½"	2½"		\$21.00	\$31.50	\$52.80	\$2.10	\$3.20	30
3"	6"	1¼"-2½"	2½"		29.00	43.70	72.30	2.60	4.40	31
4"	7"	1¼"-2½"	3¼"		39.70	59.60	101.30	3.70	6.40	32
Deduct for clamp collar					1.50	2.70	4.00			

Caulk outlet available.

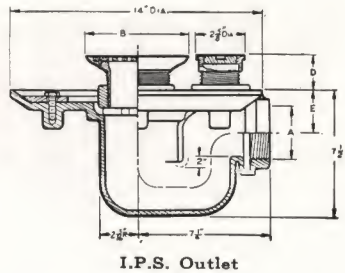
Provided with positive clamping collar and adjustable head.



Z-453—I.P.S. Outlet



Z-455



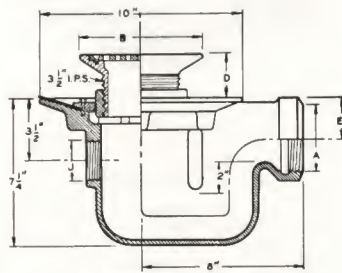
I.P.S. Outlet

**FLOOR OR SHOWER DRAIN
With Integral Trap and Floor Level Cleanout**

FIG. Z-455

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Chrome Top Add	Approx. Wt. Lbs.
1½-2"	\$30.00	\$44.10	\$68.00	\$3.40	37
3"	35.60	53.50	71.80	3.40	38
3"	38.00	55.90	74.20	3.80	39
4"	42.30	61.80	77.90	3.40	40
4"	44.70	64.20	80.30	3.80	41
Deduct for clamp collar		1.50	2.70	4.00	
Pipe Size A	B-Dia.	D		E	
1½-2"	5"	1¼"-2¼"		2⅜"	
3"	5"	1¼"-2¼"		2⅜"	
3"	6"	1¼"-2¼"		2⅜"	
4"	5"	1¼"-2¼"		2⅜"	
4"	6"	1¼"-2¼"		2⅜"	

**Recommended sizes
Caulk outlet available.

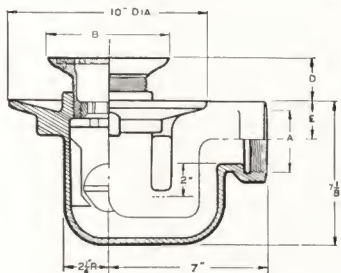


Z-460—I.P.S. Outlet

Pipe Size A	B-Dia.	D	E	J	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½-2"	4"	1"-2"	2½"	1½"-2"	\$21.00	\$33.00	\$52.80	18
1½-2"	5"	1¼"-2¼"	2½"	1½"-2"	22.50	34.50	54.40	19
3"	5"	1¼"-2¼"	2"	1½"-2"	28.10	43.60	71.50	31
3"	6"	1¼"-2¼"	2"	1½"-2"	30.50	46.00	73.90	32
3"	7"	1⅝"-3"	2"	1½"-2"	34.50	50.00	77.90	33
4"	6"	1¼"-2¼"	2½"	1½"-2"	34.80	56.20	96.50	32
4"	7"	1¼"-2¼"	2½"	1½"-2"	37.20	58.60	98.90	33
4"	8"	1½"-3"	2½"	1½"-2"	41.20	62.60	102.90	34
Deduct for clamp collar					1.50	2.70	4.00	

Deduct for clamp collar
Caulk outlet available.

For drinking fountains, refrigerator rooms and other floor areas where combined floor drainage and fixture waste connections are desired.



Z-470—I.P.S. Outlet

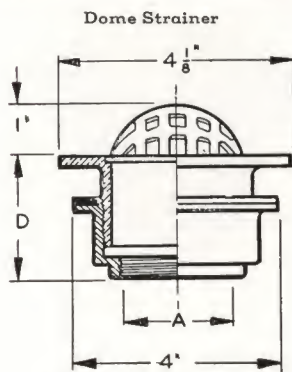
FLOOR DRAIN With Automatic Back Pressure Device

FIG. Z-470

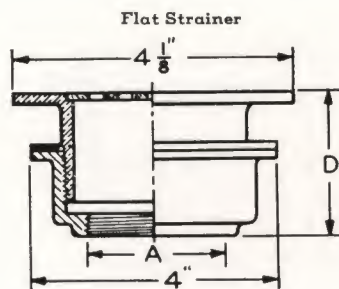
Pipe Size A	B-Dia.	D Min.—Max.	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½-2"	5"	1¼"-2¼"	2½"	\$28.50	\$40.50	\$62.40	35
3"	7"	1½"-3"	2"	40.50	50.70	84.30	36
4"	7"	1½"-3"	2½"	49.20	68.60	109.30	37
Deduct for clamp collar				1.50	2.70	4.00	

Deduct for clamp collar
Caulk outlet available.

For control of backwater from other fixtures or street sewers.



Z-475A—I.P.S. Outlet



Z-475—I.P.S. Outlet

SHOWER OR URINAL DRAINS

FIGS. Z-475 & Z-475A

Pipe Size A	All Bronze Pol.	C. P.	W. M.	Add for Dome Strainer	Approx. Wt. Lbs.
2"	\$11.00	\$12.80	\$14.70	\$1.90	2
3"	15.00	16.80	18.70	2.20	5
Pipe Size A	D Min.—Max.		Pipe Size A	D Min.—Max.	
2"	2½"-3¾"		2"	2½"-3¾"	
3"	2¼"-3¾"		3"	2¼"-3¾"	

Caulk outlet available; "D" dimension approximately 1½" longer.



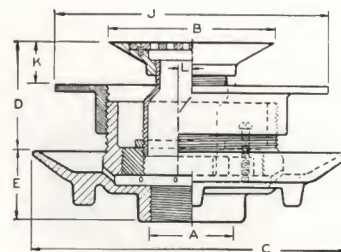
FIG. Z-476 URINAL DRAIN With Supporting Flange

Pipe Size	A	B-Dia.	C	D Min.—Max.	E	J	K Min.—Max.	Coated (DC)	Galv. (G)	All Bronze (BR)	Add for C. P.	W. M.
2"	4 1/2"	9 1/2"	3"—5"	2 1/4"	8 1/4"	1/4"—3"		\$35.90	\$47.90	\$60.20	\$1.80	\$2.80
3"	4 1/2"	9 1/2"	3"—5"	2 1/4"	8 1/4"	1/4"—3"		38.40	50.80	62.10	1.80	2.80
Add for clamp collar								2.30	3.60	4.80		

Approx. Wt. Lbs. 2"—14, 3"—15.

Caulk outlet available; "E" dimension approximately 1 1/2" longer.

Eccentric adjustability provides simple alignment required for variation in pottery or roughing.



Z-476—I.P.S. Outlet

INDUSTRIAL FLOOR AND AREA DRAINS . . . Pages 22 to 34

FIG. Z-500 AREA FLOOR DRAIN

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2-3-4"	\$10.50	\$18.30	\$41.60	\$20.30	\$29.20	22
With square top	16.00	25.90	56.00	26.40	36.80	
Clamping collar add	2.40	4.80	6.40			
Grate only	2.80	4.80	7.70			
Secondary strainer add	1.60	2.90	4.00			
Low dome strainer	4.40	7.70	10.90			
High dome strainer	6.80	11.50	14.90			
Hinged grate add	3.20	3.20	3.20			
Locking device add	2.50	2.50	2.50			
Primer connection add	2.50	2.50	2.50			

Add for B. W. Valve

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)
2-3-4"	\$12.00	\$16.30	\$19.50

Add to (CB) and (GB) Lists for

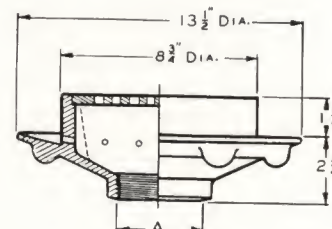
Pipe Size	C. P.	W. M.
2-3-4"	Round Top \$4.80	\$9.60
2-3-4"	Square Top 7.20	12.80

For caulk outlet, see Z-510.

For floor areas in dairies, packing plants, breweries, laundries, and other industrial and public buildings where floors are flushed and waste water does not carry sediment.



Z-500



I.P.S. Outlet

FIG. Z-505 AREA FLOOR DRAIN—Super Size

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
4-5-6"	\$19.50	\$35.00	\$83.20	\$36.00	\$53.00	46
With square top	27.20	47.00	107.20	44.80	64.20	
Clamping collar add	3.20	4.80	8.00			
Grate only	4.00	7.70	19.20			
Secondary strainer add	2.40	3.80	4.80			
Low dome strainer	6.40	11.50	24.00			
High dome strainer	10.80	17.80	28.80			
Hinged grate add	3.20	3.20	3.20			
Locking device add	2.50	2.50	2.50			
Primer connection add	2.50	2.50	2.50			

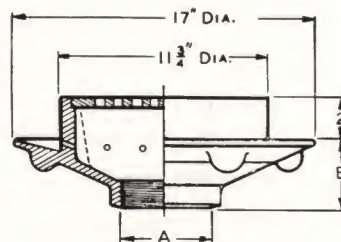
Add for B. W. Valve

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Pipe Size
4"	\$12.00	\$16.30	\$19.50	4"
5-6"	16.00	22.60	31.00	5"
				6"

Add to (CB) and (GB) Lists for

Pipe Size	C. P.	W. M.	Pipe Size
4-5-6"	Round Top \$9.60	\$14.40	4"
4-5-6"	Square Top 11.20	19.20	5"
			6"

For caulk outlet, see Z-515



Z-505—I.P.S. Outlet

E
3 1/8"
2 3/4"
2 3/4"

For same service as Z-500, but for heavier usage.

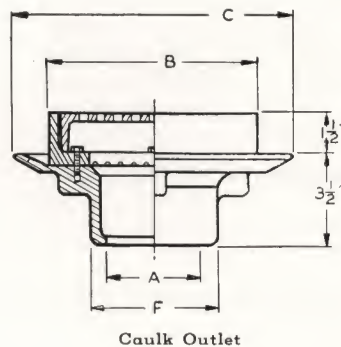


AREA FLOOR DRAIN— Shallow Type With Deep Flange Strainer

FIG. Z-509



Z-509



Caulk Outlet

Pipe Size	Cast Iron		With Bronze Top		All Bronze (BR)
	Coated (DC)	Galv. (G)	Coated (CB)	Galv. (GB)	
2-3"	\$ 9.80	\$17.10	\$18.80	\$26.10	\$38.40
3-4"	10.50	18.30	20.30	29.10	41.60
4-6"	19.50	35.00	36.00	53.00	83.20

Pipe Size	B-Dia.	C	F	Approx. Wt. Lbs.
2"	7"	9"	3 1/4"	14
3"	7"	9"	4 3/8"	15
3"	9"	11"	4 3/8"	17
4"	9"	11"	5 3/8"	21
4"	12"	15"	5 3/8"	45
6"	12"	15"	7 3/8"	46

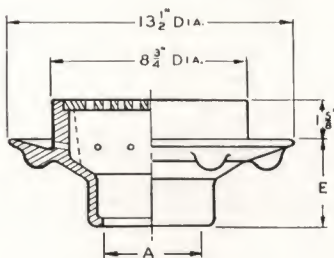
I. P. S. outlet available.

Two piece body affords tight clamping for flashing; serrated upper clamping surfaces carry off seepage water from flashing or seepage pan.

For extra heavy traffic loads, rim and grate can be furnished in steel.

AREA FLOOR DRAIN

FIG. Z-510



Z-510—Caulk Outlet

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)
2-3-4"	\$10.50	\$18.30	\$41.60
With square top	16.00	25.90	56.00
Clamping collar add	2.40	4.80	6.40
Grate only	2.80	4.80	7.70
Secondary strainer add	1.60	2.90	4.00
Low dome strainer	4.40	7.70	10.90
High dome strainer	6.80	11.50	14.90
Hinged grate add	3.20	3.20	3.20
Locking device add	2.50	2.50	2.50
Primer connection add	2.50	2.50	2.50

Pipe Size	Add for B. W. Valve		All Bronze (BR)
	Coated (DC)	Galv. (G)	
2-3-4"	\$12.00	\$16.30	\$19.50

Pipe Size	Add to (CB) and (GB) Lists for		W. M.
	Round Top	Square Top	
2-3-4"	\$ 4.80	7.20	\$ 9.60
2-3-4"			12.80

Pipe Size	Bronze Rim and Grate		Approx. Wt. Lbs.
	Coated (CB)	Galv. (GB)	
2-3-4"	\$20.30	\$29.20	24
	26.40	36.80	

Pipe Size

A

2"

3"

4"

E

4 3/4"

4 3/4"

4 1/4"

For I. P. S. outlet, see Z-500

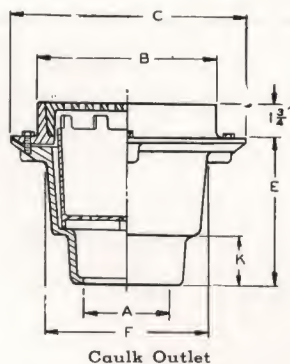
For same service as Z-500.

AREA FLOOR DRAIN— Deep Type With Deep Flange Strainer and Bucket

FIG. Z-511



Z-511



Caulk Outlet

Pipe Size	Cast Iron		With Bronze Top		All Bronze (BR)	Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	Coated (CB)	Galv. (GB)		
3-4"	\$23.40	\$37.80	\$38.70	\$54.20	\$ 65.40	41
3-4"	39.00	65.70	55.50	83.70	124.80	90

Pipe Size	B-Dia.	C	E	F	K
3-4"	9"	12"	7 1/2"	8 5/8"	2 1/2"
3-4"	12 1/2"	16"	9 3/4"	12"	3 1/4"

I. P. S. outlet available.

For same service as Z-509. Provided with deep body and sediment bucket.

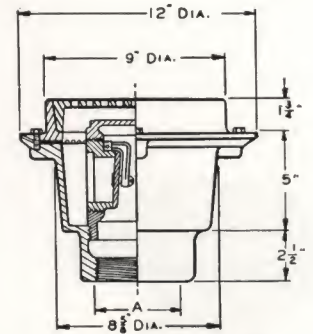
For extra heavy traffic loads, rim and grate can be furnished in steel.

FIG. Z-511-1 AREA FLOOR DRAIN With Automatic Back-Water Valve

Pipe Size	Cast Iron		All	Pol. Top—Iron Body		Approx. Wt. Lbs.
A	(DC)	(G)	Bronze	(DC)	(G)	
3-4"	\$27.80	\$43.40	\$58.20	\$43.10	\$59.70	47
Add for auxiliary inlet						
	4.50	6.30	8.00			

Caulk outlet available.

For same service as Z-511. Vertical swing gate type backwater valve.



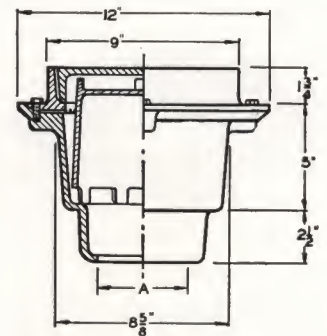
Z-511-1—I.P.S. Outlet

FIG. Z-511-2 AREA FLOOR DRAIN With Bell, and Deep Flange Strainer

Pipe Size	Cast Iron		All	Pol. Top—Iron Body		Approx. Wt. Lbs.
A	(DC)	(G)	Bronze	(DC)	(G)	
3-4"	\$21.50	\$35.40	\$69.30	\$36.80	\$51.90	41

I. P. S. outlet available.

For same service as Z-511. Inverted dome in body forms bell trap.



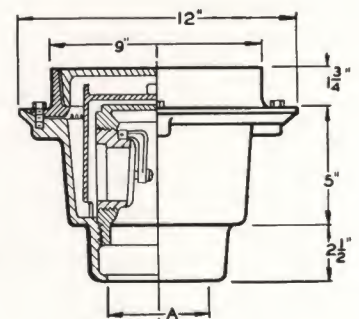
Z-511-2—Caulk Outlet

**FIG. Z-511-3 AREA FLOOR DRAIN
With Bell, Automatic Back-Water Valve, and Deep Flange Strainer**

Pipe Size	Cast Iron		All	Pol. Top—Iron Body		Approx. Wt. Lbs.
A	(DC)	(G)	Bronze	(DC)	(G)	
3-4"	\$30.60	\$48.50	\$88.60	\$45.90	\$64.80	48

I. P. S. outlet available.

For same service as Z-511. Has combination bell trap and backwater valve assembly.

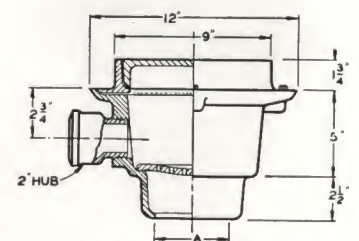


Z-511-3—Caulk Outlet

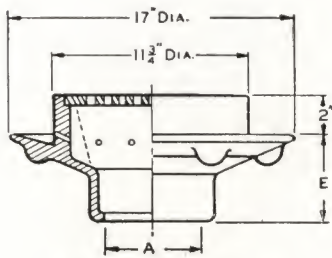
**FIG. Z-511-4 AREA FLOOR DRAIN
With Secondary Strainer Auxiliary Inlet, and Deep Flange Strainer**

Pipe Size	Cast Iron		All	Pol. Top—Iron Body		Approx. Wt. Lbs.
A	(DC)	(G)	Bronze	(DC)	(G)	
3-4"	\$25.40	\$40.50	\$75.80	\$40.70	\$56.90	44

I. P. S. outlet available.



Z-511-4—Caulk Outlet



Z-515—Caulk Outlet

Pipe Size	
A	
4-5-6"	
With square top	
Clamping collar add	
Grate only	
Secondary strainer add	
Low dome strainer	
High dome strainer	
Hinged grate add	
Locking device add	
Primer connection add	

Pipe Size

A
4"
5"
6"E
4 5/8"
5"
5"

For I. P. S. connection, see Z-505

AREA FLOOR DRAIN—Super Size

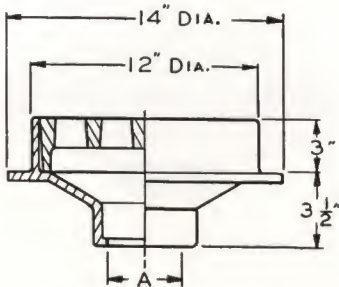
FIG. Z-515

	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
	\$19.50	\$34.90	\$83.20	\$36.00	\$52.90	46
	27.20	47.00	107.20	44.80	64.10	
	3.20	4.80	8.00			
	4.00	7.70	19.20			
	2.40	3.80	4.80			
	6.40	11.50	24.00			
	10.80	17.80	28.80			
	3.20	3.20	3.20			
	2.50	2.50	2.50			
	2.50	2.50	2.50			

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)
A			
4"	\$12.00	\$16.30	\$19.50
5-6"	16.00	22.60	31.00

Pipe Size	Round Top	Square Top	W. M.
4-5-6"	\$ 9.60	11.20	\$14.40
4-5-6"			19.20

For same service as Z-500 but for greater volume.



Z-516—Caulk Outlet

Pipe Size	
A	
2-3-4"	
5-6"	
I. P. S. available	

FACTORY AREA FLOOR DRAIN, Extra Heavy Duty Type FIG. Z-516

	Coated (DC)	Galv. (G)	All Bronze (BR)	Add for I. P. S. Outlet	Approx. Wt. Lbs.
	\$17.40	\$33.90	\$67.70	\$.50	65
	17.70	34.20	67.80	.60	77

For heavy trucking shock loads. Deep strainer flange prevents displacement of strainer from seat.

AREA FLOOR DRAIN With Side Outlet

FIG. Z-520

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
A						
1 1/2-2"	\$19.20	\$30.80	\$62.40	\$29.00	\$42.50	32
3"	19.20	30.80	62.40	29.00	42.50	33
4"	19.20	30.80	62.40	29.00	42.50	34
5"	32.60	55.50	126.70	49.10	73.70	50
6"	32.60	55.50	126.70	49.10	73.70	50
With square top—9x9"	25.30	39.00	76.80	37.30	51.00	
With square top—12x12"	41.10	67.20	150.70	58.70	86.20	
Clamp. col. "small" add	2.40	3.80	6.40			
Clamp. col. "large" add	3.20	4.80	8.00			
Grate only—8 1/4"	2.80	4.80	7.70			
Grate only—11 1/4"	4.00	7.70	19.20			
Sec. str. "small" add	1.60	2.90	4.00			
Sec. str. "large" add	2.40	3.80	4.80			
Hinged grate add	3.20	3.20	3.20			
Locking device add	2.50	2.50	2.50			



Z-520—I.P.S. Outlet

Pipe Size	C. P. Round Top	C. P. Square Top	W. M. Round Top	W. M. Square Top
2-3-4"	\$ 4.80	\$ 7.20	\$ 9.60	\$12.80
5-6"	9.60	11.20	14.40	19.20

For same service as Z-500 but with side outlet for limited space.

(Z-520 continued on following page)

FIG. Z-520 AREA FLOOR DRAIN (Cont.)

FIG. Z-520 I. P. S.

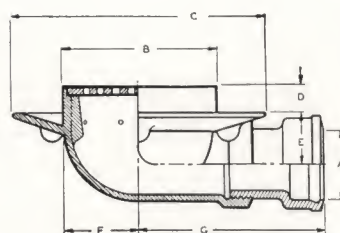
Pipe Size

A	B-Dia.	C	D	E	F	G
1½-2"	8⅞"	13½"	1¼"	3¾"	4⅞"	5⅝"
3"	8⅞"	13½"	1¼"	3¾"	4⅞"	5⅝"
4"	8⅞"	13½"	1¼"	3¾"	4⅞"	5⅝"
5"	11¾"	17"	2"	5¼"	5⅞"	7½"
6"	11¾"	17"	2"	5"	5⅞"	7½"

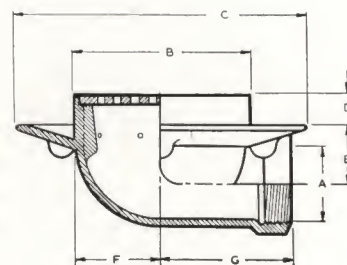
FIG. Z-520 Caulk

Pipe Size

A	B-Dia.	C	D	E	F	G
1½-2"	8⅞"	13½"	1¼"	3¾"	4⅞"	9¼"
3"	8⅞"	13½"	1¼"	3¾"	4⅞"	9⅝"
4"	8⅞"	13½"	1¼"	3¾"	4⅞"	9⅝"
5"	11¾"	17"	2"	5¼"	5⅞"	10¾"
6"	11¾"	17"	2"	5"	5⅞"	10¾"



Z-520—Hub Outlet



Z-520—I.P.S. Outlet

FIG. Z-530 DOUBLE DUTY AREA DRAIN

With Supplementary Strainer

Bronze Rim and Grate

Pipe Size	A	E	E'	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)
2-3-4"	3"	4⅝"		\$21.80	\$37.80	\$92.80	\$38.30	\$55.80
With square top				31.20	52.80	118.40	48.80	69.10
Clamping collar add				3.20	4.80	9.60		
Secondary strainer only				2.40	3.80	4.80		
Grate only				4.80	8.60	17.60		
Low dome strainer				8.00	13.40	25.60		
High dome strainer				14.40	22.10	32.00		
Hinged grate add				3.20	3.20	3.20		
Locking device add				2.50	2.50	2.50		
Primer connection add				2.50	2.50	2.50		

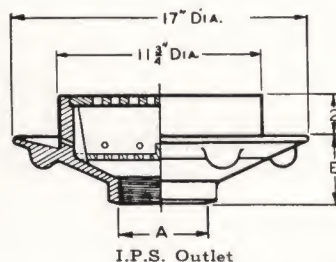
Approx. Wt. Lbs. 2-3-4"—48.

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)
2-3-4"	\$12.00	\$16.30	\$19.50

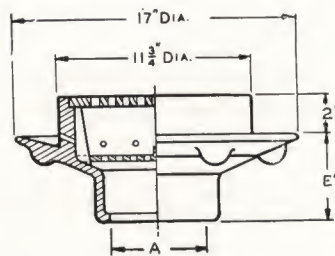
Add to (CB) and (GB) Lists for

Pipe Size	Round Top	Square Top	W. M.
2-3-4"	\$ 9.60	11.20	\$14.40
2-3-4"			19.20

For floor areas in industrial buildings where waste water carries foreign solids or other clogging material.



I.P.S. Outlet



Caulk Outlet



Z-530

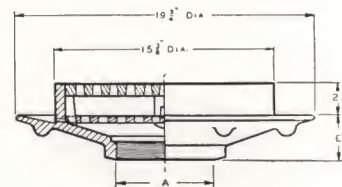
FIG. Z-535 DOUBLE DUTY AREA DRAIN—Super Size With Secondary Strainer

Pipe Size	A	E	E'	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
3-4"	5"	3½"		\$34.80	\$61.90	\$134.40	\$64.80	\$93.10	82
5"	5"	3⅞"		36.30	63.70	136.00	66.30	94.90	84
6"	5¼"	3¾"		37.60	65.50	137.60	67.80	96.70	86
8"	5"	3½"		42.30	70.90	142.30	72.30	102.10	88
Square rim and round grate add				11.20	11.40	36.00	11.20	11.40	
Clamping device add				6.40	10.60	16.00			
Grate only				12.00	20.20	35.20			
Secondary strainer only				4.00	5.80	7.20			
Low dome strainer				16.80	28.80	50.40			
High dome strainer				20.00	34.60	57.60			
Hinged Grate add				3.20	3.20	3.20			
Locking device add				2.50	2.50	2.50			
Primer connection add				2.50	2.50	2.50			

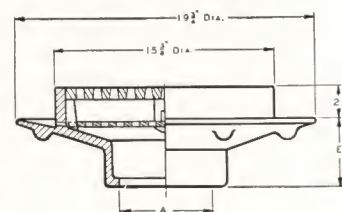
Add for B. W. Valve

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)
3-4"	\$12.00	\$16.30	\$19.50
5-6"	16.00	22.60	30.00
8"	22.40	30.70	44.80

For same service as Z-530 but for heavier usage.



I.P.S. Outlet

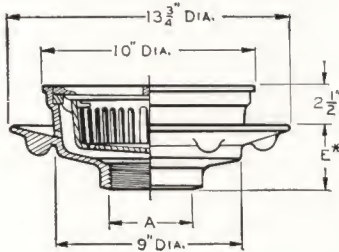


Z-535—Caulk Outlet

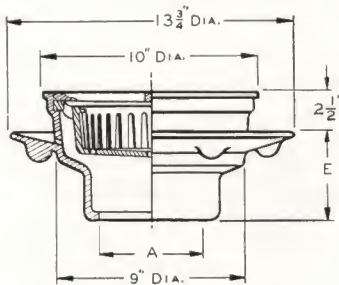


Z-540

FLOOR AND AREA DRAIN, Continuous Flow Solids Retaining Shallow Type FIG. Z-540



I.P.S. Outlet



Caulk Outlet

Pipe Size	E	E*	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4"	4 1/2"	2 1/2"	\$14.40	\$23.00	\$30.40	\$41.40	\$42.60	35
With square top			17.00	26.90	27.40	38.00	57.00	
With side outlet			20.00	31.80	30.00	43.50	53.40	
With side outlet and square top			18.70	29.90	38.70	53.90	54.30	
Grate only			2.40	3.80	5.60	6.70	6.10	
Hinged Grate, add			3.20	3.20	3.20	3.20	3.20	
Clamping device, add			3.40	5.80	2.40	3.80	7.40	
B.W.V., add			12.00	16.30	

Pipe Size	C. P.	W. M.
2-3-4"	\$5.00	\$10.60
With square top	8.20	13.80
With side outlet	5.80	5.80
With side outlet and square top	8.20	8.20

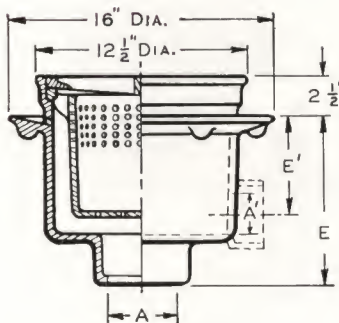
Provided with removable perforated sediment bucket. Assures continuous flow even though sediment bucket is filled. Bucket must always be returned, as top strainer will make improper fit without it.

All features of Z-540 type drain are incorporated in all drains from Z-540 to Z-544A—Pages 27 to 30 inclusive.



Z-541

FLOOR AND AREA DRAIN, Continuous Flow Solids Retaining Shallow Type FIG. Z-541



Caulk Outlet

Pipe Size	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
3-4"	\$28.80	\$49.90	\$54.40	\$78.70	\$100.10	64
5-6"	32.00	53.80	57.60	82.60	103.50	67
With square top 3-4"	30.20	52.30	57.10	82.60	105.00	
With side outlet 3-4"	36.00	60.50	68.00	98.40	125.00	
With side outlet and square top 3-4"	37.40	63.00	70.70	102.20	130.10	
With square top 5-6"	33.40	56.20	60.30	86.40	108.60	
With side outlet 5-6"	39.20	64.30	71.20	102.20	128.50	
With side outlet and square top 5-6"	40.60	66.90	73.90	106.10	133.50	
Grate only	4.80	8.60	12.80	12.80	12.80	
Hinged grate, add	3.20	3.20	3.20	3.20	3.20	
Clamping device, add	5.00	6.90	5.00	6.90	11.10	
B.W.V. 3-4", add	12.00	16.30	12.00	16.30	
B.W.V. 5-6", add	16.00	22.60	16.00	22.60	

Pipe Size	C. P.	W. M.	Pipe Size	A'	E	E'
3-4"	\$7.30	\$12.50	3"	3"	6 3/4"	3 1/8"
5-6"	7.30	12.50	4"	4"	6 3/4"	3 1/2"
With square top 3-4"	8.70	14.60	5"		6 3/4"	
With side outlet 3-4"	7.30	13.00	6"		6 3/4"	4 3/4"
With side outlet and square top 3-4"	8.70	14.60	I.P.S. outlet available			
With square top 5-6"	8.70	14.60				
With side outlet 5-6"	7.30	13.00				
With side outlet and square top 5-6"	8.70	14.60				

See details under Fig. Z-540.

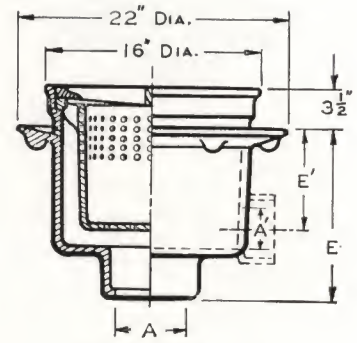
**FIG. Z-541A FLOOR AND AREA DRAIN, Continuous Flow Solids Retaining Shallow Type,
With Removable Perforated Sediment Bucket**

Pipe Size	Coated (DC)	Galv. (G)	Bronze Rim and Grate		All Bronze (BR)	Approx. Wt. Lbs.
A			Coated (CB)	Galv. (GB)		
3-4"	\$76.80	\$129.00	\$108.80	\$158.40	\$205.40	135
5-6"	80.00	127.70	112.00	162.20	208.80	137
With square top 3-4"	80.60	129.90	114.20	166.20	234.90	
With square top 5-6"	83.80	133.90	117.40	170.10	238.40	
Grate only	6.40	10.60	14.40	14.40	15.70	
Hinged grate, add	6.40	6.40	8.00	8.00	8.00	
Clamping Device, add	9.60	13.40	9.60	13.40	29.60	

Pipe Size	Add for C. P.	W. M.	Pipe Size		E	E'
A			A	A'		
3-4"	\$13.10	\$20.90	3"	3"	8 1/2"	4 1/8"
5-6"	13.10	20.90	4"	4"	8 1/2"	3 7/8"
With square top 3-4"	15.70	26.00	5"		8 1/2"	
With square top 5-6"	15.70	26.00	6"		8 1/2"	

I. P. S. outlet available.

See details under Fig. Z-540.



Z-541A—Caulk Outlet

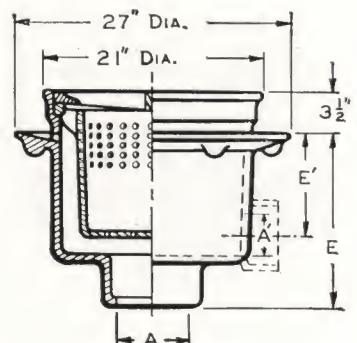
**FIG. Z-541B FLOOR AND AREA DRAIN, Continuous Flow Solids Retaining Shallow Type,
With Removable Perforated Sediment Bucket**

Pipe Size	Coated (DC)	Galv. (G)	Bronze Rim and Grate		All Bronze (BR)	Approx. Wt. Lbs.
A			Coated (CB)	Galv. (GB)		
3-4"	\$139.20	\$207.40	\$212.80	\$290.00	\$440.30	256
5-6"	142.40	211.20	216.00	293.80	443.70	259
With square top 3-4"	163.20	242.00	233.60	313.90	480.30	
With square top 5-6"	166.40	245.80	236.80	318.80	483.80	
Grate only	8.00	13.40	32.00	32.00	34.80	
Hinged grate, add	11.20	11.20	12.80	12.80	11.20	
Clamping device, add	12.80	19.20	12.80	19.20	36.50	

Pipe Size	Add for C. P.	W. M.	Pipe Size		E	E'
A			A	A'		
3-4"	\$21.80	\$43.50	3"	3"	11 1/2"	6 1/2"
5-6"	21.80	43.50	4"	4"	11 1/2"	6 1/2"
With square top 3-4"	29.60	52.20	5"	5"	11 1/2"	6 1/2"
With square top 5-6"	29.60	52.20	6"	6"	11 1/2"	6"

I. P. S. outlet available.

See details under Fig. Z-540.



Z-541B—Caulk Outlet

**FIG. Z-542 FLOOR AND AREA DRAIN, Continuous Flow Solids Retaining Deep Type,
With Removable Perforated Sediment Bucket**

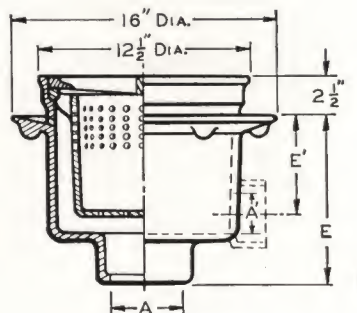
Pipe Size	Coated (DC)	Galv. (G)	Bronze Rim and Grate		All Bronze (BR)	Approx. Wt. Lbs.
A			Coated (CB)	Galv. (GB)		
3-4"	\$52.80	\$ 77.80	\$71.20	\$ 97.90	\$140.90	76
5-6"	56.00	81.60	74.40	101.80	144.40	80
With square top 3-4"	57.60	84.50	75.20	104.60	151.40	
With side outlet 3-4"	79.20	110.40	96.80	129.60	211.40	
With side outlet and square top 3-4"	84.00	117.10	101.60	136.30	221.90	
With square top 5-6"	60.80	88.30	78.40	108.50	154.90	
With side outlet 5-6"	82.40	114.20	100.00	133.40	214.90	
With side outlet and square top 5-6"	87.20	121.00	104.80	140.20	225.30	
Grate only	4.80	8.70	12.80	12.80	12.80	
Hinged grate, add	3.20	3.20	3.20	3.20	3.20	
Clamping device, add	5.00	6.90			11.10	

Pipe Size	Add for C. P.	W. M.	Pipe Size		E	E'
A			A	A'		
3-4"	\$7.30	\$13.90	3"	3"	11"	6 1/2"
5-6"	7.30	13.90	4"	4"	11"	6 1/2"
With square top 3-4"	8.70	14.60	5"	5"	11"	6"
With side outlet 3-4"	7.30	13.00	6"	6"	11"	5 1/2"
With side outlet & square top 3-4"	8.70	14.60				
With square top 5-6"	8.70	14.60				
With side outlet 5-6"	7.30	13.00				
With square top & side outlet 5-6"	8.70	14.60				

See details under Fig. Z-540.



Z-542



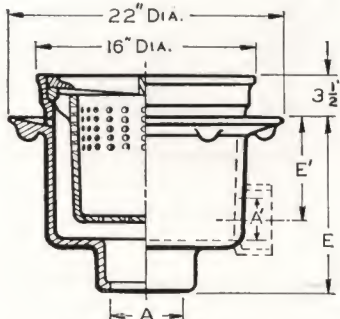
Caulk Outlet



FLOOR AND AREA DRAIN,

Continuous Flow Solids Retaining Deep Type, With Removable Perforated Sediment Bucket

FIG. Z-542A



Z-542A—Caulk Outlet

Pipe Size	Bronze Rim and Grate				All Bronze (BR)	Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	Coated (CB)	Galv. (GB)		
A						
3-4"	\$ 92.80	\$130.60	\$124.80	\$184.30	\$240.10	159
5-6"	96.00	134.40	128.00	188.20	243.60	163
With square top 3-4"	97.40	138.10	131.00	193.40	271.40	
With square top 5-6"	100.60	141.90	134.20	197.30	274.90	
With side outlet 3-4"	116.00	168.00	156.00	230.40	365.40	
With side outlet 5-6"	119.20	171.90	159.20	234.30	368.90	
With side outlet and square top 3-4"	117.40	171.90	159.00	235.70	393.30	
With side outlet and square top 5-6"	120.60	175.50	162.20	239.70	396.80	
Grate only	6.40	10.60	14.40	14.40	14.40	
Hinged grate, add	6.40	6.40	8.00	8.00	8.00	
Clamping device, add	9.60	13.40	9.60	13.40	29.60	

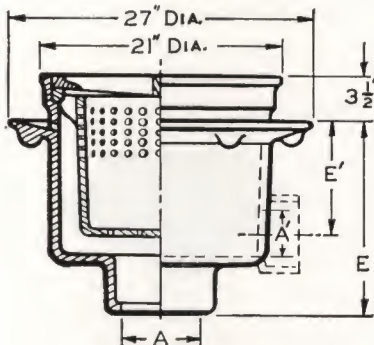
Pipe Size	Add for		Pipe Size			
	C. P.	W. M.	A	A'	E	E'
3-4"	\$13.10	\$20.90	3"	3"	11 1/2"	7 3/4"
5-6"	13.10	20.90	4"	4"	11 1/2"	7"
With square top 3-4"	15.70	26.00	5"	5"	11 1/2"	6 1/2"
With square top 5-6"	15.70	26.00	6"	6"	11 1/2"	6"
With side outlet 3-4"	13.10	20.90	I. P. S. outlet available.			
With side outlet 5-6"	13.10	20.90				
With square top & side outlet 3-4"	15.70	26.00				
With square top & side outlet 5-6"	15.70	26.00				

See details under Fig. Z-540.

FLOOR AND AREA DRAIN,

Continuous Flow Solids Retaining Deep Type, With Removable Perforated Sediment Bucket

FIG. Z-542B



Z-542B—Caulk Outlet

Pipe Size	Bronze Rim and Grate				All Bronze (BR)	Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	Coated (CB)	Galv. (GB)		
A						
3-4"	\$152.60	\$228.00	\$225.60	\$312.00	\$490.70	256
5-6"	154.80	231.80	228.80	315.80	495.00	259
With square top 3-4"	179.20	263.00	246.40	337.90	532.40	
With square top 5-6"	182.40	266.90	249.60	341.80	535.90	
Grate only	8.00	13.40	32.00	32.00	32.00	
Hinged grate, add	11.20	11.20	12.80	12.80	12.80	
Clamping device, add	12.80	19.20	12.80	19.20	36.50	

Pipe Size	Add for		Pipe Size			
	C. P.	W. M.	A	A'	E	E'
3-4"	\$21.80	\$43.50	3"	3"	14 1/2"	10"
5-6"	21.80	43.50	4"	4"	14 1/2"	9 1/2"
With square top 3-4"	29.60	52.20	5"	5"	14 1/2"	9"
With square top 5-6"	29.60	52.20	6"	6"	14 1/2"	8 1/2"

I. P. S. outlet available.

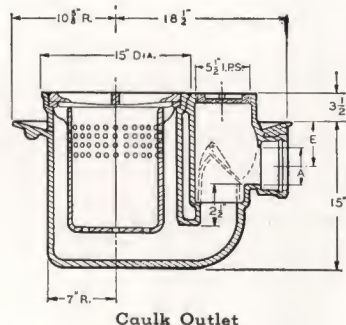
See details under Fig. Z-540.

FLOOR AND AREA DRAIN,
With Combined Trap and Floor Level Cleanout;
Continuous Flow Solids Retaining Type

FIG. Z-544



Z-544



Caulk Outlet

Pipe Size
2-3-4"Add for
C. P.
\$21.80W. M.
\$43.50

Pipe Size	Bronze Rim and Grate				All Bronze (BR)
	Coated (DC)	Galv. (G)	Coated (CB)	Galv. (GB)	
A					
2-3-4"	\$190.40	\$276.50	\$272.00	\$374.40	\$626.40
Grate only	6.40	10.60	14.40	14.40	15.70
Hinged grate, add	6.40	6.40	8.00	8.00	8.00
Clamping device, add	16.80	24.00	16.80	24.00	37.40
B.W.V. add	12.80	12.80			
Approx. Wt. Lbs. 2-3-4"—210.					

Pipe Size	Add for		Pipe Size	
	C. P.	W. M.	A	E
2"			2"	6 1/2"
3"			3"	6"
4"			4"	5 1/2"

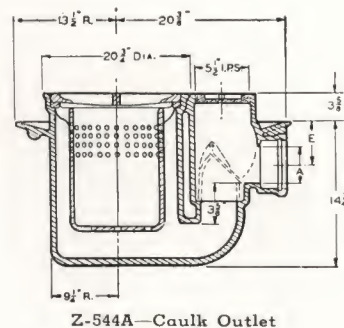
I. P. S. outlet available.

See details under Fig. Z-540.

FIG. Z-544A FLOOR AND AREA DRAIN, Continuous Flow Solids Retaining Type, With Combined Trap and Floor Level Cleanout

Pipe Size	Coated (DC)	Galv. (G)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	All Bronze (BR)	Approx. Wt. Lbs.
A						
2-3-4"	\$273.60	\$391.70	\$393.60	\$537.60	\$814.40	260
Grate only	8.00	13.50	32.00	32.00	34.80	
Hinged grate, add	11.20	11.20	12.80	12.80	11.20	
Clamping device, add	27.20	40.30	27.20	40.30		
B.W.V. add	12.80	12.80				

Pipe Size	Add for C. P.	W. M.	Pipe Size	E
2-3-4"	\$31.30	\$59.20	A	
			2"	5 3/8"
			3"	4 7/8"
			4"	4 3/8"



See details under Fig. Z-540.

I. P. S. outlet available.

FIG. Z-545 AREA FLOOR DRAIN With Deflector Strainer

Pipe Size	B-Square	D	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
A							
2-3"	6 3/4"	4"	2"	\$18.00	\$29.20	\$55.70	27
3-4"	10 1/2"	7 3/4"	2 3/4"	30.00	50.40	96.00	70
5-6"	10 1/2"	7 3/4"	2 3/4"	33.00	55.80	105.60	72
"Deflector" strainer only, small				5.10	8.60	15.40	
Flat strainer only, small				1.90	4.00	5.80	
"Deflector" strainer only, large				7.00	11.90	21.10	
Flat strainer only, large				2.90	5.80	8.60	

I. P. S. outlet available.
For schools, playgrounds, asylums, and other institutions to protect drainage lines from clogging by injection of sticks and other objects through the strainer.

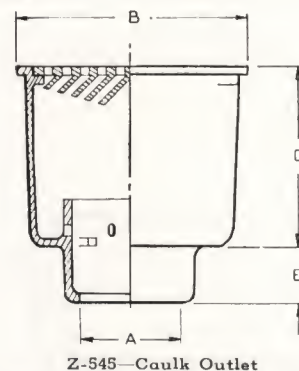


FIG. Z-546 SCHOOL PLAYGROUND DRAIN With Deflector Grate and Secondary Strainer

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
A				
2-3-4"	\$21.60	\$36.70	\$58.60	28
4-5-6"	36.90	60.50	96.00	52
"Deflector" grate only— Small	9.60	17.30	24.00	
Large	14.40	20.00	32.00	
Secondary strainer only—Small	2.40	3.80	4.80	
Large	2.90	5.80	5.80	
Clamping collar add— Small	2.40	3.80	4.80	
Large	3.20	4.80	9.60	

Pipe Size	B-Dia.	C	D	E
A				
2"	8 3/4"	13 1/2"	1 5/8"	2 3/4"
3"	8 3/4"	13 1/2"	1 5/8"	2 3/4"
4"	8 3/4"	13 1/2"	1 5/8"	2 3/4"
4"	11 3/4"	17"	2"	4 5/8"
5"	11 3/4"	17"	2"	5"
6"	11 3/4"	17"	2"	5"

I. P. S. outlet available.

For same service as Z-545.

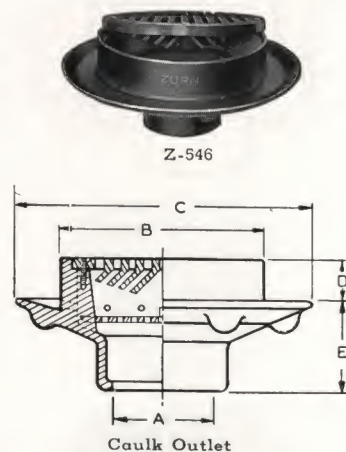


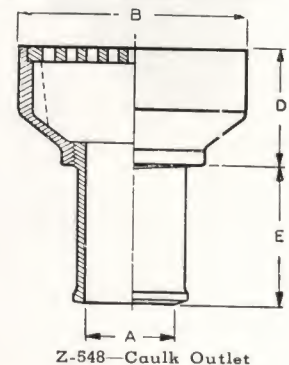
FIG. Z-548 FLOOR DRAIN

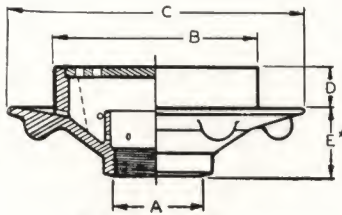
Pipe Size	B-Dia.	D	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
A									
2"	8 3/4"	4 1/2"	6"	\$ 9.80	\$17.20	\$37.10	\$21.00	\$29.60	24
3"	8 3/4"	4 1/2"	6"	11.10	20.70	45.80	22.40	33.10	25
4"	8 3/4"	4 1/2"	6"	13.70	25.80	52.30	26.00	38.30	26
2"	11 3/4"	5"	6"	13.50	23.40	51.20	34.50	46.80	47
3"	11 3/4"	5"	6"	15.00	27.00	60.80	37.50	52.20	48
4"	11 3/4"	5 1/8"	6"	18.00	32.40	67.20	42.00	59.40	49

Add for back water valve (only furnished when specified) 2"—\$6.40 3"—\$9.60 4"—\$12.80

I. P. S. outlet available.

Where long outlet is required.





Z-549—I.P.S. Outlet

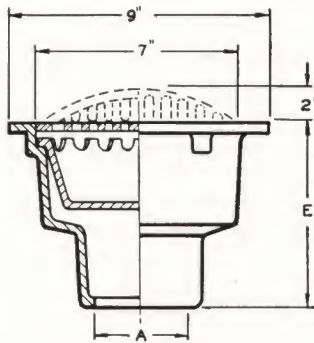
FLOOR DRAIN With Sand Retainer

FIG. Z-549

Pipe Size	B-Dia.	C	D	E	Coated (DC)	Galv. (G)	Bronze Rim and Grate		Approx. Wt. Lbs.
A							Coated (CB)	Galv. (GB)	
3.4"	11 3/4"	17"	2"	3 1/8"	\$25.90	\$42.30	\$44.60	\$63.00	47
5"	15 3/8"	19 3/4"	2"	3"	42.00	70.60	78.00	112.00	88
6"	15 3/8"	19 3/4"	2"	3"	43.50	72.40	79.50	113.80	90
Clamping collar add—Small					3.20	4.80			
Large					6.40	10.60			

Caulk outlet available; "E" dimension approximately 1 1/2" longer.

For heavy trucking areas; strainer will carry 2000 lbs. Interior sand retaining ring will keep sediment out of drain line.



Z-550—Caulk Outlet

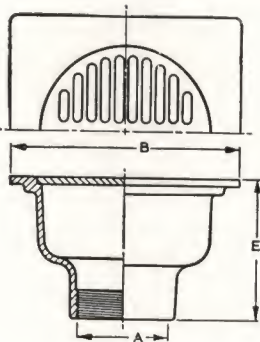
PLAIN FLOOR DRAIN With Sediment Bucket

FIG. Z-550

Pipe Size	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate		Approx. Wt. Lbs.
A					Coated (CB)	Galv. (GB)	
2-3-4"	5 1/4"	\$ 9.90	\$15.50	\$30.40	\$16.70	\$22.70	11
FIG. Z-550A with dome strainer, inside caulk connection		11.40	17.50	33.00	19.30	25.30	12
Semi-dome strainer only		3.80	5.60	12.20	12.20	12.20	
Sediment bucket deduct		3.90	5.00	5.40			
Flat strainer only		2.30	3.60	9.60			

I. P. S. outlet available.

For window wells, basement entrances or floors where seepage control is unnecessary.



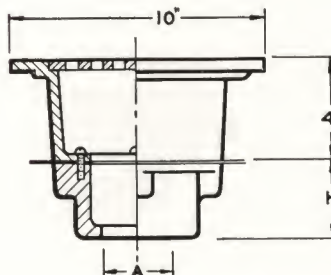
Z-555—I.P.S. Outlet

PLAIN FLOOR DRAIN

FIG. Z-555

Pipe Size	B	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer		Approx. Wt. Lbs.
A						Coated (CB)	Galv. (GB)	
2"	6"	3"	\$ 3.00	\$ 7.20	\$18.00	\$ 7.40	\$11.70	3
3"	9"	5 1/4"	7.20	17.30	43.20	13.20	24.00	10
4"	12"	5 3/8"	9.60	23.00	57.60	26.30	41.20	20
Add for hinged strainer			3.00	3.00	3.00	3.00	3.00	

Caulk outlet available; "E" dimension approximately 1 1/2" longer.



Z-556—Caulk Outlet

PLAIN FLOOR DRAIN With Hinged Strainer and Flashing Provision FIG. Z-556

Pipe Size	H	Coated (DC)	Galv. (G)	Bronze Rim and Strainer		Approx. Wt. Lbs.
A				Coated (CB)	Galv. (GB)	
3"	2 1/2"	\$ 9.60	\$16.20	\$18.00	\$26.10	13
4"	2 1/2"	10.70	19.40	19.70	30.20	14
Strainer only		2.60	4.50			

I. P. S. outlet available.

For floor areas where copper or lead flashing is necessary for seepage control.

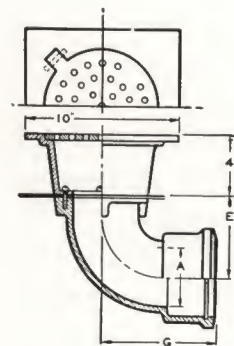


FIG. Z-556A PLAIN FLOOR DRAIN With Side Outlet, Hinged Strainer and Flashing Provision

Pipe Size			Coated (DC)	Galv. (G)	Bronze Rim and Strainer		Approx. Wt. Lbs.
A	E	G			Coated (CB)	Galv. (GB)	
2"	5 1/4"	7 1/2"	\$21.00	\$35.30	\$30.00	\$46.10	30
3-4"	5 1/4"	7 1/2"	22.50	37.10	31.50	47.90	35
Strainer only			2.60	4.50			

I. P. S. outlet available.

For same service as Z-556.



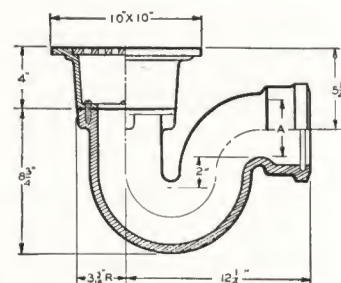
Z-556A—Hub Outlet

FIG. Z-556B FLOOR DRAIN AND TRAP With Hinged Strainer and Flashing Provision

Pipe Size			Coated (DC)	Galv. (G)	Bronze Rim and Strainer		Approx. Wt. Lbs.
A					Coated (CB)	Galv. (GB)	
3"			\$27.00	\$45.40	\$40.50	\$61.60	42
4"			28.50	47.20	42.00	63.40	43

I. P. S. outlet available.

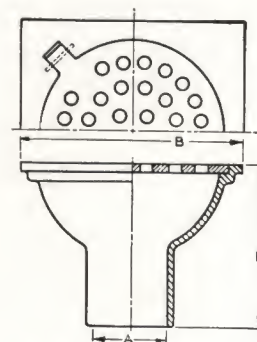
For floor areas requiring integral trap and copper or lead flashing for seepage control.



Z-556B—Hub Outlet

FIG. Z-560 PLAIN FLOOR DRAIN With Hinged Strainer

Pipe Size			Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer		Approx. Wt. Lbs.
A	B	E				Coated (CB)	Galv. (GB)	
2"	6x6"	3"	\$ 2.70	\$ 6.30	\$15.80	\$ 7.90	\$12.60	4
3"	9x9"	6 1/2"	5.30	12.60	31.50	14.70	24.00	15
4"	12x12"	7 3/4"	10.50	25.20	63.00	28.20	46.40	27



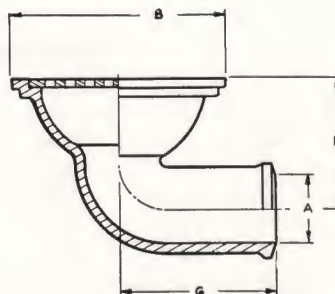
Z-560—Spigot Outlet

FIG. Z-565 PLAIN FLOOR DRAIN With Hinged Strainer

Pipe Size				Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer	
A	B	E	G				Coated (CB)	Galv. (GB)
2"	6"	3 1/4"	5 3/4"	\$ 6.00	\$14.40	\$36.00	\$12.00	\$21.60
3"	9"	5 1/2"	6 1/2"	12.00	28.80	72.00	22.80	41.80
4"	12"	6 3/8"	7 1/2"	24.00	57.60	144.00	44.20	81.80

Approx. Wt. Lbs. 2"—7, 3"—18, 4"—21.

I. P. S. outlet available.



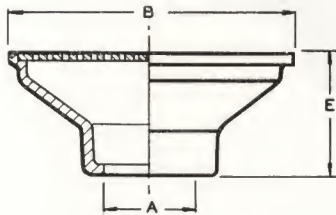
Spigot Outlet



Z-565

HEAVY GUTTER DRAIN

FIG. Z-575



Z-575—Caulk Outlet

Pipe Size	Length						Bronze Rim and Grate		
A	B	Width	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2-3-4"	13"	5 1/2"	5 3/4"	\$11.20	\$18.40	\$38.40	\$20.80	\$28.80	18
5-6"	15 1/2"	7 5/8"	5 1/2"	22.40	37.40	87.40	39.70	46.60	30
3-4-5-6"	24 1/8"	7 1/8"	6"	44.80	67.20	94.00	68.80	72.80	42
Grate only							Chrome plated top		
12	x4 1/2"			4.00	6.70	9.60	add \$8.00		
14 1/4	x6 1/2"			5.60	9.60	16.00	add 9.20		
23	x6"			10.40	17.30	19.20	add 14.00		
Convex grate only									
12"	x4 1/2"			7.20	10.60	12.80			
14"	x6 1/2"			8.80	13.40	19.20			
23"	x6"			16.00	24.00	26.40			

I. P. S. outlet available.

For narrow gutters in swimming pools and battery shower rooms, providing rapid drainage.

HEAVY GUTTER DRAIN With Seepage Pan

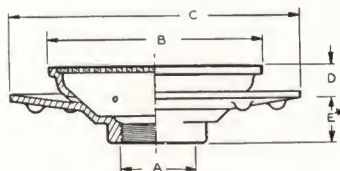
FIG. Z-580



Z-580

Pipe Size	Coated	Galv.	All Bronze	Bronze Rim and Grate		
A	(DC)	(G)	(BR)	Coated	Galv.	Approx.
				(CB)	(GB)	Wt. Lbs.
2-3-4"	\$16.00	\$25.40	\$49.60	\$28.00	\$38.40	31
5-6"	28.80	48.00	101.80	46.10	66.40	38
3-4-5-6"	54.40	75.80	128.00	78.70	102.70	55
Grate only						
12 x4½"	4.00	6.70	8.00	Chrome Plated Top		
				add \$8.00		
14¼x6½"	5.60	9.60	16.00	add 10.20		
23 x6"	10.40	17.30	19.20	add 14.00		
Clamping collar add						
2-3-4"	5.00	7.20	9.60			
5-6"	6.00	10.80	16.00			
3-4-5-6"	12.00	18.00	22.00			

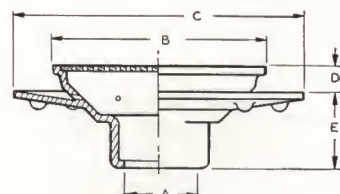
FIG. Z-580 I. P. S.



I.P.S. Outlet

Pipe Size	Length of Top	Width of Top	Body Length	Body Width	D	E
A	B		C			
2"	13"	5 1/2"	17 1/2"	10"	2"	2"
3"	13"	5 1/2"	17 1/2"	10"	2"	2"
4"	13"	5 1/2"	17 1/2"	10"	2"	2"
5"	15 1/2"	7 5/8"	19 1/2"	12"	1 5/8"	4"
6"	15 1/2"	7 5/8"	19 1/2"	12"	1 5/8"	4"
3"	24 1/8"	7 1/8"	28 1/2"	11 1/2"	2"	2 3/4"
4"	24 1/8"	7 1/8"	28 1/2"	11 1/2"	2"	2 3/4"
5"	24 1/8"	7 1/8"	28 1/2"	11 1/2"	2"	2 3/4"
6"	24 1/8"	7 1/8"	28 1/2"	11 1/2"	2"	2 3/4"

FIG. Z-580 I. C.



Caulk Outlet

Pipe Size	Length of Top	Width of Top	Body Length	Body Width	D	E
A	B		C			
2"	13"	5 1/2"	17 1/2"	10"	2"	3 3/4"
3"	13"	5 1/2"	17 1/2"	10"	2"	3 1/2"
4"	13"	5 1/2"	17 1/2"	10"	2"	3 1/2"
5"	15 1/2"	7 5/8"	19 1/2"	12"	1 5/8"	3 7/8"
6"	15 1/2"	7 5/8"	19 1/2"	12"	1 5/8"	3 7/8"
3"	24 1/8"	7 1/8"	28 1/2"	11 1/2"	2"	4"
4"	24 1/8"	7 1/8"	28 1/2"	11 1/2"	2"	4"
5"	24 1/8"	7 1/8"	28 1/2"	11 1/2"	2"	4"
6"	24 1/8"	7 1/8"	28 1/2"	11 1/2"	2"	4"

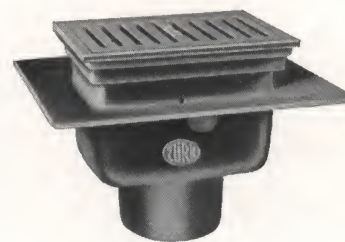
For same service as Z-575.



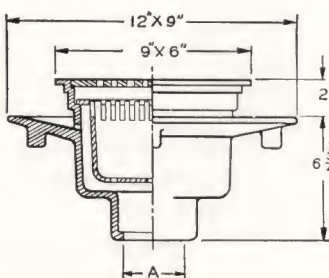
FIG. Z-585 GUTTER DRAIN With Hinged Grate and Seepage Pan

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)
2-3-4"	\$27.00	\$50.40	\$86.40	\$37.50	\$59.40
Clamp collar, add	3.00	4.00	6.00		
With loose strainer deduct \$2.30					
Approx. Wt. Lbs. 2-3-4"—30.					

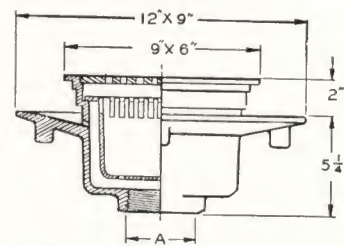
Practical rectangular drain with removable sediment bucket.



Z-585



Z-585—Caulk Outlet



Z-585—I.P.S. Outlet

FIG. Z-589 GUTTER DRAIN

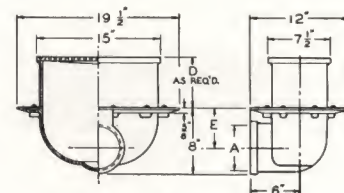
Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4-5-6"	\$66.00	\$108.00	\$208.00	75
Clamp collar, add	10.10	17.30	32.00	

Caulk outlet available.

Clamping facility for flashing if required.

Pipe Size A
4"
5"
6"

E
5 7/8"
4 7/8"
4 3/8"



Z-589—I.P.S. Outlet

FIG. Z-590 FLOOR DRAIN With Internal Trap, With Seepage Pan

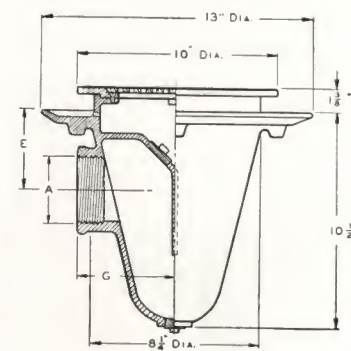
Pipe Size A	E	G	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	2 3/8"	4 3/4"	\$21.00	\$36.00	\$69.10	35
3"	2 5/8"	4 3/4"	25.50	42.30	77.10	36
4"	2 5/8"	4 3/4"	31.50	51.30	85.10	37
5"	3 3/4"	5 1/4"	37.50	58.50	93.10	38
6"	3 3/4"	5 1/4"	43.50	65.70	102.70	39
Clamp collar add			3.00	4.50	5.60	

Pipe Size A	Coated (CB)	Galv. (GB)	Chrome Top Add	W. M. Top Add
2"	\$30.80	\$47.70	\$ 8.00	\$10.40
3"	36.80	55.80	8.00	10.40
4"	43.50	65.70	8.00	10.40
5"	51.00	74.70	8.00	10.40
6"	57.00	81.90	8.00	10.40

Hinged strainer add \$3.00

Caulk outlet available.

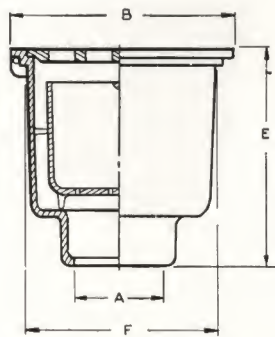
Provides large drainage capacity within limited space.



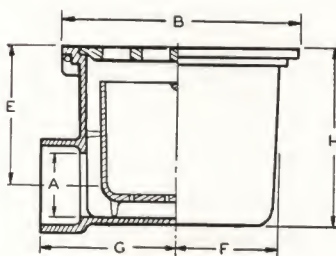
Z-590—I.P.S. Outlet



SPECIAL PURPOSE DRAINS . . . Pages 35 to 44



Z-600—Caulk Outlet



Z-605—Caulk Outlet

Z-600, Bottom Outlet

Pipe Size	Top Size	Coated (DC)	Galv. (G)	All Bronze (BR)
A				
2-3-4"	9"x9"	\$18.00	\$30.20	\$69.10
2-3-4"	12"x12 1/2"	36.00	60.50	138.20
5-6"	12"x12 1/2"	42.00	67.70	144.60
7" grate only		3.20	5.80	11.20
10" grate only		5.20	9.20	19.20
Small bucket only		5.60	8.70	19.20
Large bucket only		8.80	14.40	28.80
Small secondary strainer or dam only		1.60	2.90	4.00
Large secondary strainer or dam only		2.40	3.80	4.80
Hinged grate add		3.20	3.20	3.20

Pipe Size

A
2-3-4"
2-6"

B
9"x9"
12"x12 1/2"

E
7 1/2"
12 3/4"

F
7"
10 1/4"

I. P. S. outlet available.

Z-605, Side Outlet, add to above prices 9" x 9" \$6.40 12" x 12 1/2" \$9.60.

Pipe Size

A
2"
3"
4"
2"
3"
4"
5"
6"

B
9"x9"
9"x9"
9"x9"
12"x12 1/2"
12"x12 1/2"
12"x12 1/2"
12"x12 1/2"
12"x12 1/2"

E
3 1/2"
3"
3 1/4"
8"
7 3/4"
7 1/2"
7 1/4"
7"

F
3 1/2"
3 1/2"
3 1/2"
5 3/8"
5 3/8"
5 3/8"
5 3/8"
5 3/8"

G
5 7/8"
5 7/8"
5 7/8"
7 7/8"
7 7/8"
7 7/8"
7 7/8"
7 7/8"

H
5"
5"
5"
10 1/4"
10 1/4"
10 1/4"
10 1/4"
10 1/4"

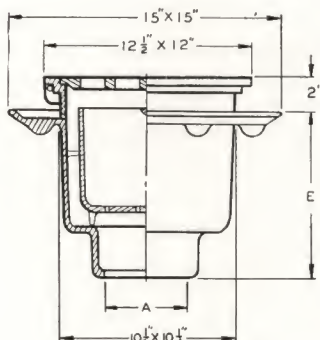
Approx. Wt. Lbs.
25
25
25
71
71
71
71
71

I. P. S. outlet available.

For waste water containing sediment.

Service Station DRAIN, Heavy Type

FIGS. Z-610 & Z-615



Z-610—Caulk Outlet

Z-610 Bottom Outlet

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
A						
2-3-4"	\$39.00	\$65.70	\$124.80	\$55.50	\$83.20	75
5-6"	45.00	72.90	131.20	61.50	90.40	78
Clamping collar add	3.20	4.80	9.60			
Grate	4.80	8.60	17.60			
Bucket	9.60	16.10	28.80			
Secondary strainer add	2.40	3.80	4.80			
Hinged grate add	3.20	3.20	3.20			
Locking device add	2.50	2.50	2.50			

Add to (CB) and (GB) Lists for

C. P. \$12.80 W. M. \$16.00

Coated (DC)
\$12.00

Add for B. W. Valve

Galv. (G)
\$16.30

All Bronze (BR)
\$19.50

Pipe Size

A
2-6"

E
10 7/8"

I. P. S. outlet available.

Z-615 Side Outlet—Add to above prices \$9.60.

Pipe Size

A
2"
3"
4"
5"
6"

B
12"x12 1/2"
12"x12 1/2"
12"x12 1/2"
12"x12 1/2"
12"x12 1/2"

C
15" sq.
15" sq.
15" sq.
15" sq.
15" sq.

E
5 7/8"
5 7/8"
5 7/8"
5 7/8"
4 7/8"

F
5 1/8"
5 1/8"
5 1/8"
5 1/8"
5 1/2"

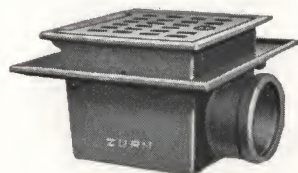
G
8 1/4"
8 1/4"
8 1/4"
8 1/4"
8 1/4"

H
10 1/4"
10 1/4"
10 1/4"
10 1/4"
10 1/4"

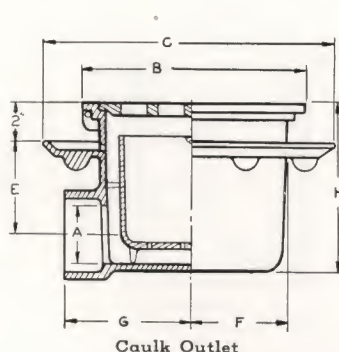
Approx. Wt. Lbs.
81
81
81
81
81

I. P. S. outlet available.

For waste water containing sediment, and where seepage control or floor anchorage is required.



Z-615

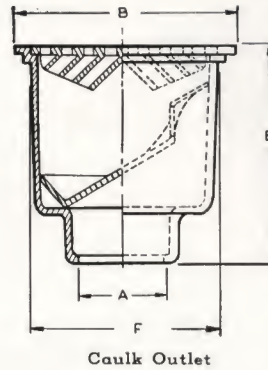


Caulk Outlet

FIG. Z-616 School and Playground DRAIN, Heavy Type, With Deflector Grate and Bottom Outlet

Pipe Size					Coated (DC)	Galv. (G)	All Bronze (BR)
A	B	E	F				
2-3-4"	8 1/2" x 8 1/2"	9"	7" sq.		\$21.60	\$38.30	\$ 72.00
4-5-6"	12" x 12 1/2"	13"	10 3/8" sq.		36.00	60.30	115.20
7" "deflector" grate only					8.00	14.40	24.80
10" "deflector" grate only					12.00	19.20	48.00
Small intercepting dam strainer only					2.40	4.80	6.40
Large intercepting dam strainer only					4.00	6.70	8.80

I. P. S. outlet available.
Approx. Wt. Lbs. 2"-3"-4"—24, 4"-5"-6"—66.



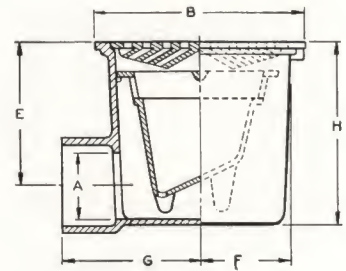
Z-616

For schools, playgrounds, asylums and other institutions to prevent drain clogging by injection of sticks and other objects through the strainer.

FIG. Z-617 Court or Area DRAIN, Heavy Type, With Deflector Grate and Side Outlet

Pipe Size					Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.	Pipe Size						
A	B	E	F	G	H				A	B	E	F	G	H	
2-3-4"						\$25.20	\$44.30	\$ 80.00	24	2"	8 1/2" x 8 1/2"	5 1/4"	3 5/16"	8"	6 1/2"
4-5-6"						42.30	75.60	172.80	68	3"	8 1/2" x 8 1/2"	4 1/16"	3 5/16"	9 13/16"	6 1/2"
Small seepage pan add						6.40	10.60	22.40		4"	8 1/2" x 8 1/2"	4 3/16"	3 5/16"	10 3/16"	6 1/2"
Large seepage pan add						8.00	13.40	28.80		4"	12" x 12 1/2"	7 1/2"	5 3/16"	7 7/8"	10 1/4"
7" "deflector" grate only						8.00	14.40	24.80		5"	12" x 12 1/2"	7 1/4"	5 3/16"	7 7/8"	10 1/4"
10" "deflector" grate only						11.00	19.20	48.00		6"	12" x 12 1/2"	7"	5 3/16"	7 7/8"	10 1/4"
Small sediment bucket only						8.00	11.50	22.40							
Large sediment bucket only						11.20	15.40	30.40							

I. P. S. outlet available.



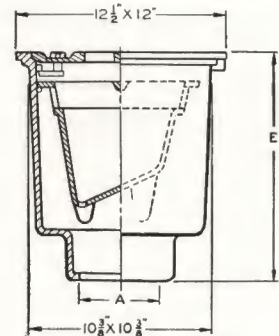
Z-617—Caulk Outlet

For same service as Z-616.

FIG. Z-620 Court or Area DRAIN, Heavy Type, With Grate Locking Device, Bottom Outlet

Pipe Size					Coated Body	Galv. Body	Approx. Wt. Lbs.
A	E						
2-3-4"	12 3/4"				\$36.00	\$60.50	66
5-6"	13"				40.50	65.90	68
Dirt arrestor in lieu of bucket—deduct					2.00	4.80	
Malleable bucket only					14.00	24.00	
Malleable bucket only					12.00	21.60	

I. P. S. outlet available.



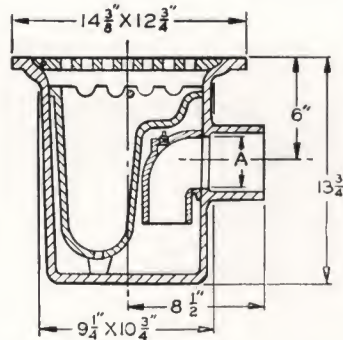
Z-620—Caulk Outlet

Provided with non-slip cover.

FIG. Z-630 Boiler Room Heavy Duty DRAIN, With Internal Trap and Sediment Bucket, Side Outlet

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
A						
2-6"	\$60.00	\$100.80	\$230.40	\$93.00	\$137.70	108

Hinged grate, add \$3.00



Hub Outlet

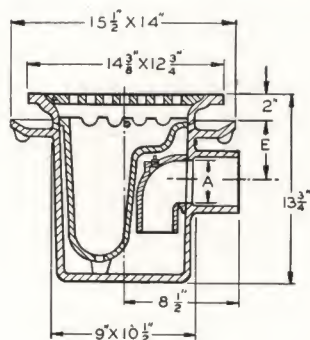


Z-630



Boiler Room Heavy Duty DRAIN, With Seepage Pan and Sediment Bucket

FIG. Z-635



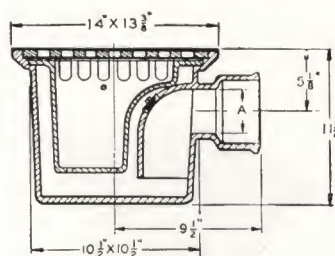
Z-635—Caulk Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate	
				Coated (CB)	Galv. (GB)
2-6"	\$69.00	\$113.00	\$248.30	\$102.80	\$153.50
Clamping collar add	3.00	6.30	9.60		
Grate	7.50	11.70	27.20		
Bucket	12.00	19.80	43.20		

Add for hinged grate \$3.00

Pipe Size A	E	Approx. Wt. Lbs.
2-3.4"	4"	120
5"	4 1/2"	125
6"	5"	126

I. P. S. outlet available.



Z-645—Caulk Outlet

Industrial Heavy Duty DRAIN, With Integral Trap, Sediment Bucket and Side Outlet

FIG. Z-645

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate		Approx. Wt. Lbs.
				Coated (CB)	Galv. (GB)	
2-6"	\$45.60	\$76.20	\$149.80	\$80.80	\$114.60	113
Grate only	8.50	12.70	23.20	23.20	23.20	
Bucket only	12.00	21.00	48.00	12.00	21.10	
Hinged grate add	3.20	3.20	3.20	3.20	3.20	
With seepage pan add	9.60	14.40		9.60	14.40	
With clamping collar add	8.00	10.00		4.80	8.60	

Add to (CB) and (GB) Lists for

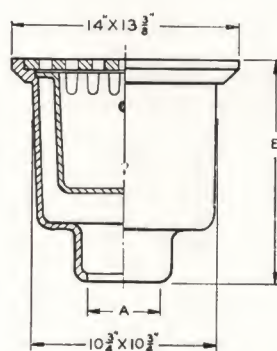
Pipe Size A
2-6"

C. P.
\$17.60

W. M.
\$22.40

Pipe Size A
2-3"
4"
5"
6"

E
5 1/8"
5 1/8"
5 1/8"
5 1/8"



Caulk Outlet



Z-650

Railroad or Track DRAIN, With Multi-Connections, and Sediment Bucket

FIG. Z-650

Z-650 Bottom Outlet

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate		Approx. Wt. Lbs.
				Coated (CB)	Galv. (GB)	
2-6"	\$39.80	\$67.90	\$146.60	\$75.80	\$107.50	100
Grate	7.50	12.60	25.60			
Bucket	11.30	19.80	48.00			
Hinged grate add	3.00	3.00	3.00			
Seepage pan	9.60	14.40				
Clamping collar	8.00	10.00				

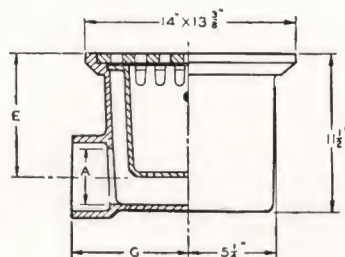
Pipe Size A
2-6"

I. P. S. outlet available.

Z-650 Side Outlet—Add to above prices, \$9.60

Pipe Size A	E	G	Approx. Wt. Lbs.
2"	9 7/8"	7 3/4"	98
3"	9 1/4"	8"	100
4"	8 3/4"	8 1/4"	102
5"	8 1/4"	8 1/4"	103
6"	7 3/4"	8 1/4"	104

I. P. S. outlet available.



Side Caulk Outlet

For station trackways, driveways and floor areas where drains are connected in a series and not trapped individually.

FIG. Z-655 Laundry Or Dairy DRAIN With Seepage Pan and Sediment Bucket, Side Outlet

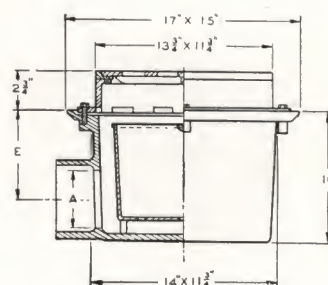
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Galv. (GB)
2-6"	\$67.40	\$110.20	\$214.60	\$122.90	\$165.70
Grate	11.70	19.30	34.60	Hinged grate add \$4.50	
Bucket	13.20	22.10	42.20		

Add for B. W. Valve 2"—\$6.00; 3"—\$9.00; 4"—\$12.00

Pipe Size	E	Approx. Wt. Lbs.
2-3-4"	7 $\frac{3}{4}$ "	115
5"	7"	116
6"	6 $\frac{1}{2}$ "	118

Bottom outlet or I.P.S. outlet available.

For laundries, dairies and other floor areas where large capacity and seepage control or floor anchorage is required.



Z-655—Caulk Outlet

FIG. Z-660 Factory DRAIN

With Flashing Provision For Variable Slabs, Bottom Outlet

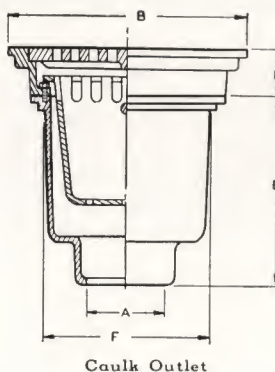
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Galv. (GB)
2-3-4"	\$40.80	\$68.40	\$101.80	\$58.80	\$84.90
4-5-6"	72.00	121.00	257.30	99.00	136.80
10" grate only	8.00	13.40	25.00	Hinged Grate add \$4.00	
13" grate only	14.00	22.80	30.00	Locking device add \$2.00	
Small bucket only	10.00	16.80	30.00	Side outlet add \$9.60	
Large bucket only	13.00	21.60	54.00		
Small dam only	3.00	6.00	10.00		
Large dam only	6.00	10.20	16.00		

Approx. Wt. Lbs. 2-3-4"—49, 4-5-6"—102.

Pipe Size	B	D	E	F
2-3-4"	12"x12 $\frac{1}{2}$ "	3"	7 $\frac{1}{2}$ "	7" sq.
4-5-6"	16" sq.	3 $\frac{1}{2}$ "	10 $\frac{3}{4}$ "	10 $\frac{1}{2}$ " sq.

I. P. S. outlet available.

For extra heavy traffic loads, rim and grate can be furnished in steel.



Caulk Outlet



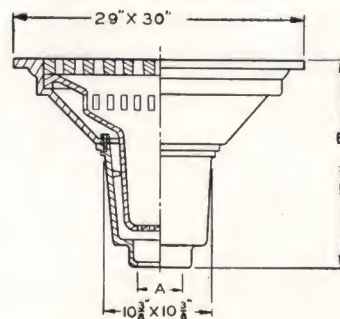
Z-660

FIG. Z-661 Highway Garage DRAIN With Sludge Bucket and Overflow Provision, Bottom Outlet

Pipe Size	E	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
2-3-4-5-6"	21 $\frac{1}{2}$ "	\$240.00	\$432.00	300
Top grate only		72.00	129.60	
Sludge bucket only		48.00	86.40	

I. P. S. outlet available.

For highway or public garages where heavy truck, tractor or snow-removal equipment is used. Grate will withstand shock load.



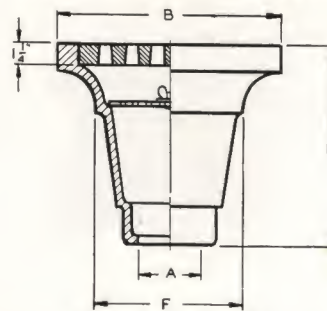
Z-661—Caulk Outlet

FIG. Z-662 Heavy Duty Garage DRAIN With Secondary Strainer

Pipe Size	Coated (DC)	Galv. (G)	Pipe Size	B	E	F	Approx. Wt. Lbs.
2-3-4"	\$37.20	\$62.60	2"	12 $\frac{3}{8}$ " sq.	11 $\frac{1}{2}$ "	7 $\frac{7}{8}$ " sq.	59
Grate only	15.00	25.20	3"	12 $\frac{3}{8}$ " sq.	11 $\frac{1}{8}$ "	7 $\frac{7}{8}$ " sq.	
Secondary strainer only	1.50	2.70	4"	12 $\frac{3}{8}$ " sq.	10 $\frac{3}{4}$ "	7 $\frac{7}{8}$ " sq.	

I. P. S. outlet available.

Extra heavy top grate will carry heaviest loads.



Z-662—Caulk Outlet



FIG. Z-675 Garbage Can Washing Floor DRAIN, With Mesh Basket

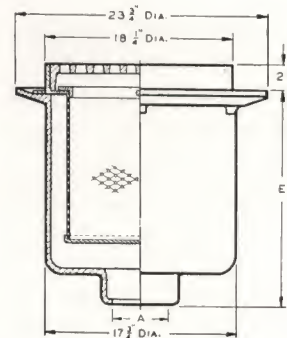
Pipe Size A	E	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
2-6"	20 3/4"	\$246.00	\$406.80	240

Deduct when galv. wire basket is required \$10.50

Deduct when cast iron bucket is required \$26.70

I. P. S. Bottom or Side Outlets and Caulk Side Outlets available.

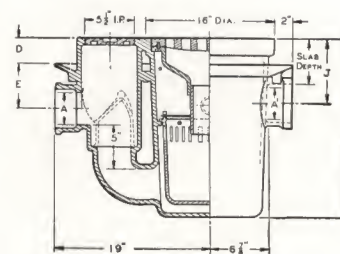
Can be used with sediment bucket as extra large sump. Flange type strainer.
16 mesh basket.



Z-675—Caulk Outlet

FIG. Z-690 Garage DRAIN Extra Heavy Duty, With Gas Seal Cone, Sediment Bucket, Trap and Cleanout

Pipe Size A & A'	D	E	H	J	Slab Depth	Coated (DC)	Galv. (G)	Bronze Rim and Grate		Approx. Wt. Lbs.
								Coated (CB)	Galv. (GB)	
3-4"	2 1/2"	6 1/2"	22 3/4"	6 1/2"	4"	\$207.60	\$345.90	\$252.60	\$399.90	384
3-4"	4 1/2"	6 1/2"	24 3/4"	8 1/2"	6"	207.60	345.90	252.60	399.90	390
3-4"	6 1/2"	6 1/2"	26 3/4"	10 1/2"	8"	219.60	365.70	264.60	419.70	396
3-4"	8 1/2"	6 1/2"	28 3/4"	12 1/2"	10"	231.60	385.60	276.60	439.60	402
3-4"	10 1/2"	6 1/2"	30 3/4"	14 1/2"	12"	243.60	405.30	288.60	459.30	410
Clamping collar add						20.00	34.80			
Grate only						18.00	30.00	36.00	36.00	
Bucket only						30.40	50.80			
Gas seal cone only						14.40	24.20			
Less seepage pan, deduct						33.00	48.00			
Hinged grate add						10.00	10.00	10.00	10.00	
Back water valve add \$16.00										
I. P. S. outlet available.										

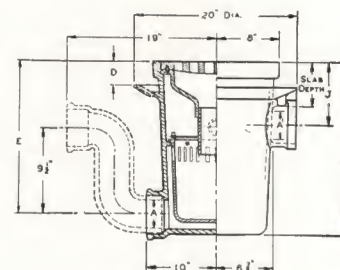


Z-690—Caulk Outlet

Will carry load of heaviest trucks. For floor areas where waste water contains gasoline, oil and sediment.

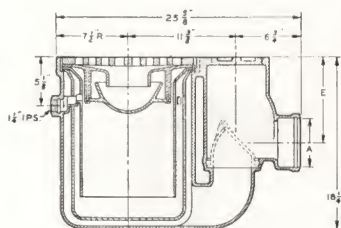
FIG. Z-691 Oil And Gas Heavy Duty Garage DRAIN

Pipe Size A & A'	D	E	H	J	Slab Depth	Coated (DC)	Galv. (G)	Bronze Rim and Grate		Approx. Wt. Lbs.
								Coated (CB)	Galv. (GB)	
3-4"	2 5/8"	18 1/2"	22 3/4"	6 1/2"	4"	\$151.20	\$221.80	\$187.20	\$265.00	303
3-4"	4 5/8"	20 1/2"	24 3/4"	8 1/2"	6"	162.00	237.20	198.40	281.30	308
3-4"	6 5/8"	22 1/2"	26 3/4"	10 1/2"	8"	172.80	253.50	208.80	297.60	313
3-4"	8 5/8"	24 1/2"	28 3/4"	12 1/2"	10"	171.80	252.90	205.50	293.40	318
3-4"	10 5/8"	26 1/2"	30 3/4"	14 1/2"	12"	183.20	269.80	219.20	313.00	323
Clamping collar add						9.10	12.80			
Trap connection add						16.00	26.40			
Grate only						6.00	9.60	18.00	18.00	
Bucket only						30.40	50.80			
Gas seal cone only						14.40	24.20			
Less seepage pan, deduct						33.00	48.00			
I. P. S. outlet available.										



Z-691—Caulk Outlet

Will carry load of heaviest trucks. For floor areas where waste water contains gasoline, oil and sediment.



Caulk Outlet
Shows Oil Drawoff— $1\frac{1}{4}$ " I.P.S.



Z-697
Patented

Volatile Liquids Intercepting DRAIN

FIG. Z-697

Pipe Size	A	E	Coated (DC)	Approx. Wt. Lbs.
3"		9"	\$285.00	400
4"		9"	285.00	400
Add for B.W. Valve, if required			22.50	

Volatile Liquids Intercepting DRAIN

With Oil Drawoff

FIG. Z-697-1

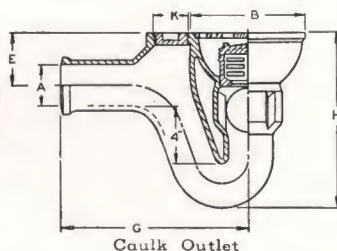
Add to Z-697 price \$45.00

Retention Capacities—550 Cu. In. or approximately $2\frac{1}{2}$ Gal.

Intercepts, separates and recovers oils, gasoline, etc. from waste water. Provides engineered protection against fires, explosions and water pollution. Specially designed for installations where volatile fluids such as gasoline, oil, naphtha, etc., having a lower specific gravity than water, are apt to be discharged into drainage lines. Volatile liquids safety seal in a chamber directly beneath the heavy grate prevents the possibility of explosion and limits the possibility of ignition to a small area in the center of the drain where a flame can be extinguished easily.



Z-700



Caulk Outlet

Subsurface Backwater DRAIN, With Integral Trap

And Floor Level Cleanout FIG. Z-700

Pipe Size	A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer		Approx. Wt. Lbs.
					Coated (CB)	Galv. (GB)	
2"		\$32.30	\$49.00	\$ 93.90	\$45.00	\$63.00	26
3"		44.30	67.00	125.60	54.80	78.30	36
4"		56.40	84.30	161.30	69.80	99.90	39

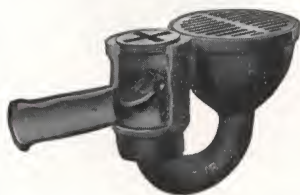
Hinged strainer add \$3.00

Less cleanout deduct \$1.50 all sizes

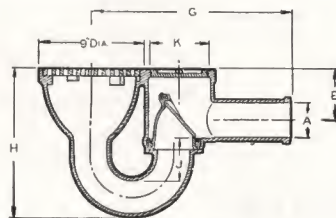
Less float valve deduct 2"—\$6.00; 3"—\$9.00; 4"—\$12.00

Pipe Size	A	B-Dia.	E	G	H	K
2"		8 $\frac{1}{4}$ "	3 $\frac{1}{4}$ "	11 $\frac{7}{8}$ "	10 $\frac{5}{8}$ "	1 $\frac{1}{2}$ "
3"		8 $\frac{3}{8}$ "	3 $\frac{7}{8}$ "	13 $\frac{9}{16}$ "	12 $\frac{3}{4}$ "	2 $\frac{1}{2}$ "
4"		12"	4 $\frac{3}{8}$ "	15 $\frac{1}{2}$ "	15"	3 $\frac{1}{2}$ "

Vertical, secondary strainer provides float seat; by reversing this strainer, it serves as a solid plug to close the line entirely, as protection of line during installation, and as positive closure against excessive backwater.



Z-730



Caulk Outlet

FLOOR DRAIN And TRAP, With Backwater Flap Valve FIG. Z-730

Pipe Size	A	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate		Approx. Wt. Lbs.
					Coated (CB)	Galv. (GB)	
2"		\$32.30	\$48.90	\$ 93.90	\$45.00	\$63.00	36
3"		44.30	66.90	125.60	54.80	78.30	54
4"		56.40	85.40	161.20	69.80	99.90	79

Add for auxiliary inlet 8.00 10.60 11.20

Pipe Size	A	E	G	H	J	K
2"		3 $\frac{3}{4}$ "	14 $\frac{7}{8}$ "	11"	4"	3 $\frac{1}{2}$ "
3"		4 $\frac{3}{8}$ "	17 $\frac{1}{8}$ "	13"	4"	4 $\frac{1}{2}$ "
4"		4 $\frac{3}{4}$ "	19 $\frac{1}{2}$ "	16"	5"	5 $\frac{1}{2}$ "

Chrome P. top add 2" \$7.70
3" 8.00
4" 8.80

If furnished without B. W. Valve, deduct 2" \$6.40
3" 9.60
4" 12.80

Combined drain and deep seal trap. Extra heavy grate. Floor level access cleanout.

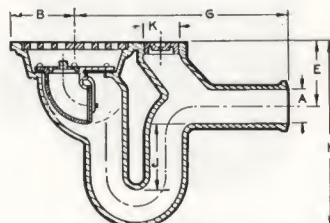
FIG. Z-731 Combined DRAIN and Integral, Deep Seal TRAP With B. W. Valve And Floor Level Cleanout

Pipe Size	Bronze Rim and Grate				Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	Coated (CB)	Galv. (GB)	
2"	\$22.50	\$30.60	\$31.50	\$ 40.50	32
3"	40.50	55.80	56.30	73.80	50
4"	63.00	89.10	79.50	104.40	80

Less B.W.V. deduct 2"—\$11.20; 3"—\$14.40; 4"—\$23.20

Pipe Size	A	B	E	G	H	J	K
2"		3 15/16"	3 7/8"	13 1/16"	11 1/4"	4"	2" I.P.S.
3"		5 1/8"	5"	17"	13 1/2"	4"	3" I.P.S.
4"		6"	5 7/8"	18 1/2"	16 1/4"	4"	4" I.P.S.

Swing check valve provided on house side of drain.



Caulk Outlet



Z-731

FIG. Z-735 FLOOR DRAIN And TRAP With Sediment Bucket And Backwater Valve

Pipe Size	Bronze Rim and Grate			Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	All Bronze (BR)	
2"	\$ 53.60	\$ 82.20	\$132.30	\$ 67.20
3"	69.60	105.80	167.80	80.80
4"	85.80	131.70	218.90	101.60

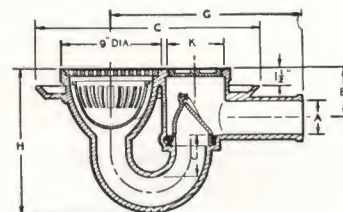
C. P. Top, add 2"	\$7.70
3"	8.00
4"	8.80

Clamping collar add	4.00	6.00	12.00
Deduct for bucket	6.40	11.50	19.20

If Less B.W. Valve, Deduct 2"—\$6.40; 3"—\$9.60; 4"—\$12.80

Pipe Size	A	C	E	G	H	J	K
2"		18"	3 3/4"	14 7/8"	11"	4"	3 1/2"
3"		19 7/8"	4 1/4"	17 1/8"	13"	4"	4 1/2"
4"		19 7/8"	4 1/4"	17 1/8"	13"	4"	4 1/2"

Combined drain and deep seal trap. Extra heavy grate. Floor level access cleanout.



Z-735

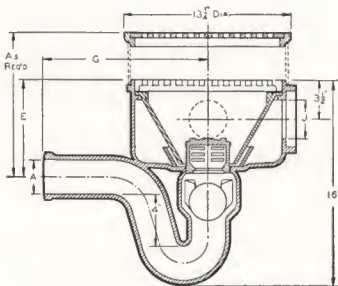
FIG. Z-750 Basement And Foundation DRAIN With Integral Trap And Backwater Valve

Pipe Size	Bronze Rim and Grate				Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	
3"	\$54.30	\$96.90	\$119.00	\$68.10	\$108.00
4"	54.30	96.90	119.00	68.10	108.00

Less extension provision, deduct	4.70
Less float valve, deduct	12.00
Additional drain tile inlet, add	1.50

Approx. Wt. Lbs. 3"—80, 4"—83.

Tile pipe connection provides for subsoil drainage.



Caulk Outlet



Z-750

FIG. Z-752 Basement Subsoil DRAIN With Backwater Valve and Round Float

Pipe Size	Bronze Rim and Grate			Add for C. P.	Approx. Wt. Lbs.
	Coated (DC)	Galv. (G)	Coated (CB)		
3"	\$30.00	\$56.20	\$40.50	\$ 8.00	80
4"	36.00	64.40	49.40	8.80	82

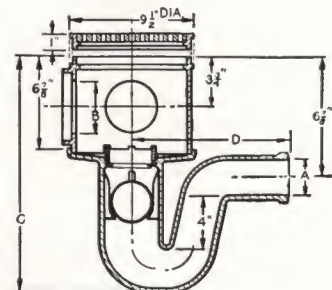
Add for B.W. Valve on tile inlets—\$3.00

Hinged strainer add—\$3.00

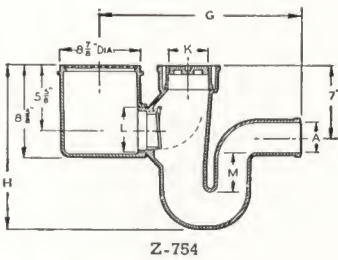
Deduct for B.W. Valve 3"—\$9.00; 4"—\$12.00

Available with brass swing check backwater valve in place of float valve.

Tile pipe connection provides for subsoil drainage. Top strainer and frame can be set at any desired level with the use of sheet metal extension.



Z-752



Z-754



Z-754-1

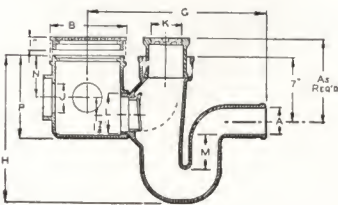
FLOOR DRAIN With Integral Trap, B. W. Valve and Floor Level Cleanout FIG. Z-754, Z-754-1

Z-754 Pipe Size	Coated (DC)		Galv. (G)		Bronze Rim and Grate Coated (CB) Galv. (GB)		Add for C. P.	Approx. Wt. Lbs.
	A							
3"		\$44.30		\$66.90	\$54.80	\$78.30	\$ 8.00	82
4"		\$56.40		\$85.40	69.80	99.90	8.80	84
Add for bucket—3"		5.40		8.30				
—4"		6.80		11.40				
Strainer only		4.40		7.90				
Hinged strainer add		\$3.00						
Deduct for B.W. Valve 3"		—\$9.60						
4"		—\$12.80						

Pipe Size	A	G	H	K	L	M
3"		20 3/4"	15 1/2"	3 1/2"	4"	4"
4"		22"	16 5/8"	4 1/2"	5"	4 3/4"

Z-754-1	Coated (DC)	Galv. (G)
Add for Tile Inlet	\$7.50	\$9.90

Z-754, Z-754-1 Furnished with solid cover when specified.

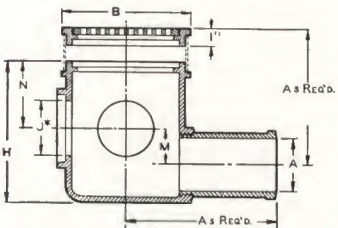
Adjustable Combination Basement and Subsoil DRAIN With Backwater Valve and Floor Level Cleanout FIG. Z-755

Z-755

Pipe Size	Coated (DC)		Galv. (G)		All Bronze (BR)		Bronze Rim and Grate Coated (CB) Galv. (GB)		Add for C. P.	Approx. Wt. Lbs.
	A									
3"		\$49.00		\$85.60	\$181.30		\$61.00	\$ 97.60	\$8.00	77
4"		\$53.00		\$92.00	196.10		65.00	104.00	8.80	79
Strainer only		4.40		7.90						
Hinged strainer add		\$3.00								
Deduct for B.W. Valve 3"		—\$9.60								
4"		—\$12.80								

Pipe Size	A	B-Dia.	G	H	J	K	L	M	N	P
3"		9 1/2"	20 3/4"	15 1/2"	4"	3 1/2"	4"	4"	3 3/4"	8 1/2"
4"		9 1/2"	22"	16 5/8"	4"	4 1/2"	5"	4 3/4"	3 3/4"	8 1/2"

Tile pipe connection provides for subsoil drainage. Top strainer and frame can be set at any desired level with the use of sheet metal extension. Furnished with solid cover when specified.

Adjustable Combination Basement and Subsoil DRAIN FIG. Z-755-2

Z-755-2

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Polished Bronze Top		Add for C. P.	Approx. Wt. Lbs.
				Coated (CB)	Galv. (GB)		
3"	\$16.50	\$30.30	\$79.20	\$31.80	\$48.40	\$8.00	43
4"	22.00	40.40	88.00	34.00	52.40	8.80	44
Pipe Size							
A	B-Dia.		H	J	M		N
3"	9 1/2"		8 1/2"	4"	1 7/8"		3 3/4"
4"	9 1/2"		8 1/2"	4"	1 7/8"		3 3/4"

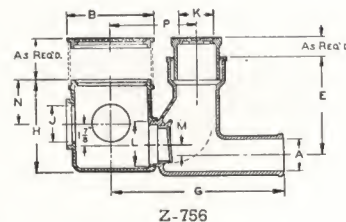
Tile pipe connections provide for subsoil drainage. Sheet metal extension piece cut to proper length permits location of strainer and frame at required level. Furnished with solid cover when specified.

FIG. Z-756 Adjustable Combination Basement and Subsoil DRAIN
With Tile Inlets and Backwater Valve

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Polished Bronze Top Coated (CB)	Galv. (GB)	Add for C. P.	Approx. Wt. Lbs.
3"	\$30.50	\$51.70	\$128.80	\$42.80	\$63.80	\$8.00	70
4"	36.00	64.50	166.40	49.50	78.00	8.80	75

Deduct for B. W. Valve 3"—\$9.60; 4"—\$12.80

Pipe Size	B	E	G	H	K	L	M	N	P
3"	9 1/2"	9 3/4"	18 3/8"	8 1/2"	4 1/2"	5"	7 7/8"	3 3/4"	9 3/4"
4"	9 1/2"	9 3/4"	18 3/8"	8 1/2"	4 1/2"	5"	7 7/8"	3 3/4"	9 3/4"

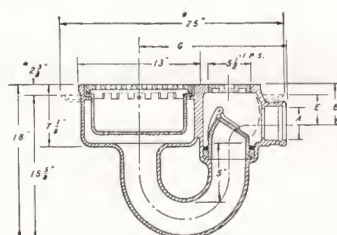


Same service as Z-755-2, but with backwater valve and adjustable floor level cleanout. Tile pipe connection provides for subsoil drainage. Top strainer and frame can be set at any desired level with the use of sheet metal extension.

FIG. Z-760 Superservice Boiler House DRAIN and Trap
With Backwater Valve and Sediment Bucket

Pipe Size	E'	E	G	Coated (DC)	Galv. (G)	All Bronze (BR)	Coated Galv. (CB) (GB)	Bronze Rim and Grate
2"	6 1/8"	3 3/4"	16 1/2"	\$61.10	\$98.80	\$213.60	\$80.30	\$119.00
3"	6 1/8"	3 3/4"	16 1/2"	68.40	109.10	229.90	87.60	129.20
4"	6 1/8"	3 3/4"	16 1/2"	80.10	126.40	260.20	99.30	146.50

Add for seepage pan 25.60 38.40 56.00 25.60 38.40
Add for clamping collar 6.00 10.80 16.00 6.00 10.80
Hinged grate add \$3.20
Less backwater valve, deduct 2"—\$6.40; 3"—\$9.60; 4"—\$12.80
Approx. Wt. Lbs. 2"—109, 3"—110, 4"—112.



Hub Outlet



Z-760
I.P.S. Outlet

For all heavy duty requirements. Regularly furnished with outlet for I.P.S. connection.

FIGS. Z-798, 798A, 798B

Industrial Catch Basin Frames and COVERS

Z-798—Solid Cover

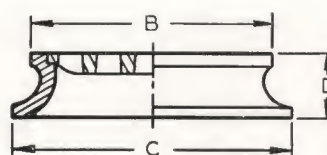
B-Dia.	C	D	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
12 7/8"	14"	3"	\$23.60	\$ 56.70	24
18"	21"	5 1/8"	56.30	135.00	91
24"	27"	5"	85.50	205.20	218

Z-798A—Grate Cover

B-Dia.	C	D	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
12 7/8"	14"	3"	\$22.50	\$ 54.00	20
18" heavy	21"	5 1/8"	49.50	118.80	85
18" double duty	21"	5 1/8"	61.90	138.50	175
24" heavy	27"	5"	64.10	153.90	137
24" extra heavy	27"	5"	86.50	206.90	227

Z-798B—Convex Cover

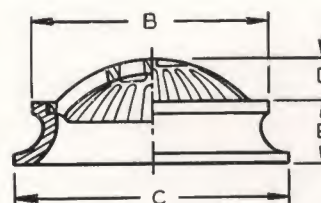
B-Dia.	C	D	E	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
12 7/8"	14"	3"	5"	\$36.00	\$ 85.40	22
18"	21"	5 1/8"	5"	57.40	137.70	89
24"	27"	5"	5"	74.30	178.20	140



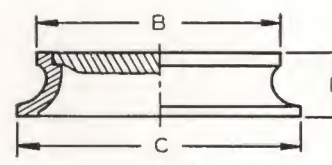
Z-798A



Z-798A



Z-798B



Z-798

For general heavy industrial usage. Will not loosen from cement.



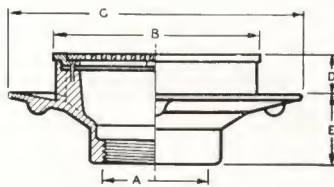
SWIMMING POOL DRAINS AND ACCESSORIES . . . Pages 45 to 51

Swimming Pool Discharge DRAIN

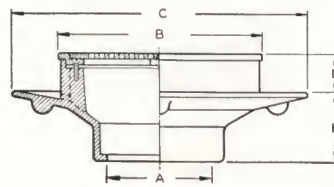
FIG. Z-800



Z-800



I.P.S. Outlet



Caulk Outlet

I. P. S. or inside caulk

Pipe Size	Str.	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
A	Dia.						
2"	8"	\$17.50	\$29.40	\$50.40	\$25.60	\$35.40	26
3"	8"	18.40	30.80	52.50	26.40	36.80	26
4"	8"	20.30	34.00	58.80	28.90	50.00	26

Clamping collar, add

Chrome plated strainer, add

White metal strainer, add

7.20 7.20
12.80 12.80

I. P. S. or Inside Caulk

Pipe Size	Str.	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
A	Dia.						
3"	10"	\$23.90	\$42.00	\$94.50	\$44.10	\$64.10	48
4"	10"	23.90	42.00	94.50	44.10	64.10	48
5"	10"	25.40	45.20	98.00	46.40	67.20	48
6"	10"	26.30	47.30	101.50	48.10	69.30	48

Clamping collar, add

Chrome plated strainer, add

White metal strainer, add

11.20 11.20
19.20 19.20

Pipe Size

Dimensions for Small Size Body

A	B	C	D	E	E*
2"	10"	13 1/2"	2"	2 3/4"	4 3/4"
3"	10"	13 1/2"	2"	2 3/4"	4 3/4"
4"	10"	13 1/2"	2"	2 3/4"	4 3/4"

* For caulked outlet.

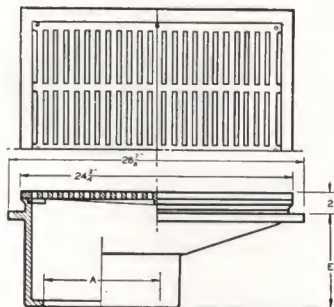
Pipe Size

Dimensions for Large Size Body

A	B	C	D	E	E*
3"	13 1/4"	17"	2 1/4"	3 1/8"	4 5/8"
4"	13 1/4"	17"	2 1/4"	3 1/8"	4 5/8"
5"	13 1/4"	17"	2 1/4"	2 3/4"	5"
6"	13 1/4"	17"	2 1/4"	2 3/4"	5"

* For caulked outlet.

Anchorage flange provides permanent leak-proof installation.



Z-801-Caulk Outlet

Main Outlet Pool DRAIN

FIG. Z-801

Pipe Size	E	Coated (CB)	Bronze Rim and Strainer Galv. (GB)	Approx. Wt. Lbs.
A				
6"	7 3/4"	\$142.20	\$156.50	180
8"	7 3/4"	147.50	165.50	185
10"	7 3/4"	168.50	201.70	189
12"	7 3/4"	195.60	237.80	195

I. P. S. outlet available.

Supersize rapid discharge drain can be installed in bottom, or side wall. Anchorage flange assures tight installation.

Swimming Pool Discharge DRAIN

FIG. Z-805



Z-805-Caulk Outlet

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Galv. (GB)
A					
4-5-6"	\$ 59.50	\$102.60	\$220.50	\$ 82.60	\$124.80
6-8-10"	125.30	210.40	451.50	158.20	239.40

Clamping collar, add

Add to (CB) and (GB) Lists for

Pipe Size

C. P.

W. M.

4-5-6"

\$14.40

\$18.00

6-8-10"

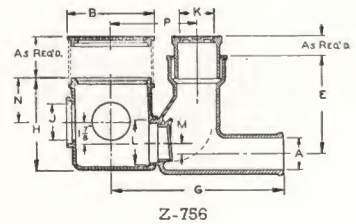
16.00

32.00

Large strainer open area ratio. Quick discharge. Concrete anchorage flange. Z-805 Continued on Following Page

**FIG. Z-756 Adjustable Combination Basement and Subsoil DRAIN
With Tile Inlets and Backwater Valve**

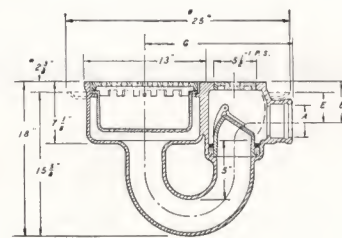
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Polished Bronze Top		Add for C. P.	Approx. Wt. Lbs.			
A				Coated (CB)	Galv. (GB)					
3"	\$30.50	\$51.70	\$128.80	\$42.80	\$63.80	\$8.00	70			
4"	36.00	64.50	166.40	49.50	78.00	8.80	75			
Deduct for B. W. Valve 3"—\$9.60; 4"—\$12.80										
Pipe Size	B	E	G	H	K	L	M	N	P	
A										
3"	9½"	9¾"	18¾"	8½"	4"	4½"	5"	7⅞"	3¾"	9¾"
4"	9½"	9¾"	18¾"	8½"	4"	4½"	5"	7⅞"	3¾"	9¾"



Same service as Z-755-2, but with backwater valve and adjustable floor level cleanout. Tile pipe connection provides for subsoil drainage. Top strainer and frame can be set at any desired level with the use of sheet metal extension.

**FIG. Z-760 Superservice Boiler House DRAIN and Trap
With Backwater Valve and Sediment Bucket**

				Bronze Rim and Grate				
Pipe Size				Coated (DC)	Galv. (G)	All Bronze (BR)	Coated (CB)	Galv. (GB)
A	E'	E	G					
2"	6 1/8"	3 3/4"	16 1/2"	\$61.10	\$98.80	\$213.60	\$80.30	\$119.00
3"	6 1/8"	3 3/4"	16 1/2"	68.40	109.10	229.90	87.60	129.20
4"	6 1/8"	3 3/4"	16 1/2"	80.10	126.40	260.20	99.30	146.50
Add for seepage pan				25.60	38.40	56.00	25.60	38.40
Add for clamping collar				6.00	10.80	16.00	6.00	10.80
Hinged grate add \$3.20								
Less backwater valve, deduct 2"—\$6.40; 3"—\$9.60; 4"—\$12.80								
Approx. Wt. Lbs. 2"—109, 3"—110, 4"—112.								



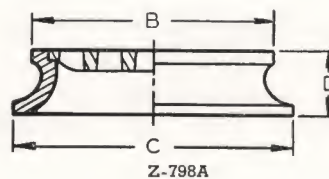
Z-760
I.P.S. Outlet

For all heavy duty requirements. Regularly furnished with outlet for I.P.S. connection.

FIGS. Z-798, 798A, 798B

Industrial Catch Basin Frames and COVERS

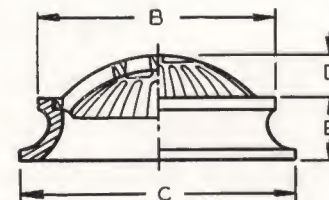
Z-798—Solid Cover					
B-Dia.	C	D	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
12 7/8"	14"	3"	\$23.60	\$ 56.70	24
18"	21"	5 1/8"	56.30	135.00	91
24"	27"	5"	85.50	205.20	218
Z-798A—Grate Cover					
B-Dia.	C	D	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
12 7/8"	14"	3"	\$22.50	\$ 54.00	20
18" heavy	21"	5 1/8"	49.50	118.80	85
18" double duty	21"	5 1/8"	61.90	138.50	175
24" heavy	27"	5"	64.10	153.90	137
24" extra heavy	27"	5"	86.50	206.90	227
Z-798B—Convex Cover					
B-Dia.	C	D	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
12 7/8"	14"	3"	\$36.00	\$ 85.40	22
18"	21"	5 1/8"	57.40	137.70	89
24"	27"	5"	74.30	178.20	140



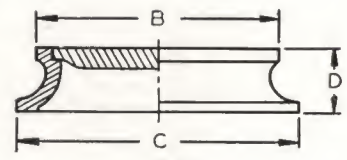
Z-798A



Z-798A



Z-798B



Z-798

For general heavy industrial usage. Will not loosen from cement.



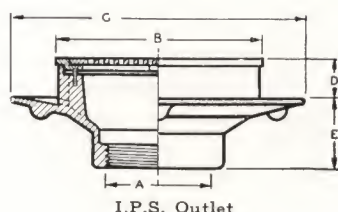
SWIMMING POOL DRAINS AND ACCESSORIES . . . Pages 45 to 51

Swimming Pool Discharge DRAIN

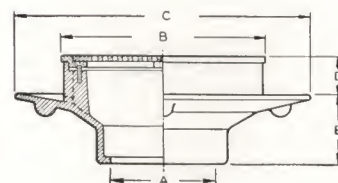
FIG. Z-800



Z-800



I.P.S. Outlet



Caulk Outlet

I. P. S. or inside caulk

Pipe Size	Str.	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
A	Dia.						
2"	8"	\$17.50	\$29.40	\$50.40	\$25.60	\$35.40	26
3"	8"	18.40	30.80	52.50	26.40	36.80	26
4"	8"	20.30	34.00	58.80	28.90	50.00	26

Clamping collar, add

Chrome plated strainer, add

White metal strainer, add

I. P. S. or Inside Caulk

Pipe Size	Str.	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
A	Dia.						
3"	10"	\$23.90	\$42.00	\$94.50	\$44.10	\$64.10	48
4"	10"	23.90	42.00	94.50	44.10	64.10	48
5"	10"	25.40	45.20	98.00	46.40	67.20	48
6"	10"	26.30	47.30	101.50	48.10	69.30	48

Clamping collar, add

Chrome plated strainer, add

White metal strainer, add

Pipe Size

Dimensions for Small Size Body

A	B	C	D	E	E*
2"	10"	13 1/2"	2"	2 3/4"	4 3/4"
3"	10"	13 1/2"	2"	2 3/4"	4 3/4"
4"	10"	13 1/2"	2"	2 3/4"	4 3/4"

* For caulked outlet.

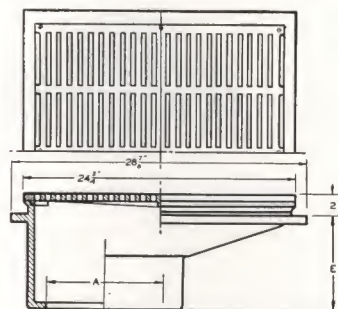
Pipe Size

Dimensions for Large Size Body

A	B	C	D	E	E*
3"	13 1/4"	17"	2 1/4"	3 1/8"	4 5/8"
4"	13 1/4"	17"	2 1/4"	3 1/8"	4 5/8"
5"	13 1/4"	17"	2 1/4"	2 3/4"	5"
6"	13 1/4"	17"	2 1/4"	2 3/4"	5"

* For caulked outlet.

Anchorage flange provides permanent leak-proof installation.



Z-801—Caulk Outlet

Main Outlet Pool DRAIN

FIG. Z-801

Pipe Size	E	Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
A				
6"	7 3/4"	\$142.20	\$156.50	180
8"	7 3/4"	147.50	165.50	185
10"	7 3/4"	168.50	201.70	189
12"	7 3/4"	195.60	237.80	195

I. P. S. outlet available.

Supersize rapid discharge drain can be installed in bottom, or side wall. Anchorage flange assures tight installation.

Swimming Pool Discharge DRAIN

FIG. Z-805



Z-805—Caulk Outlet

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Grate Coated (CB)	Galv. (GB)
A					
4-5-6"	\$ 59.50	\$102.60	\$220.50	\$ 82.60	\$124.80
6-8-10"	125.30	210.40	451.50	158.20	239.40

Clamping collar, add

Add to (CB) and (GB) Lists for

Pipe Size

A	C. P.	W. M.
4-5-6"	\$14.40	\$18.00
6-8-10"	16.00	32.00

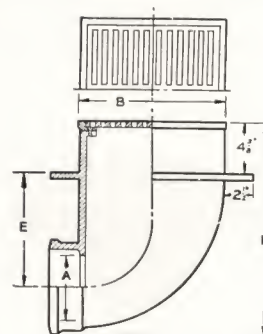
Large strainer open area ratio. Quick discharge. Concrete anchorage flange. Z-805 Continued on Following Page

(Continued from Previous Page)

FIG. Z-805 Swimming Pool Discharge DRAIN

Pipe Size A	B	E	H	Approx. Wt. Lbs.
4"	12"x12"	10 ⁵ / ₈ "	18"	94
5"	12"x12"	10 ¹ / ₈ "	18"	95
6"	12"x12"	9 ⁵ / ₈ "	18"	96
6"	12"x12"	21 ⁵ / ₈ "	30"	125
8"	12"x12"	20 ⁵ / ₈ "	30"	128
10"	12"x12"	18 ⁵ / ₈ "	30"	132

I. P. S. outlet available.



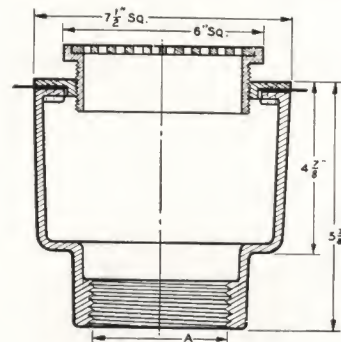
Z-805—Caulk Outlet

FIG. Z-807 Swimming Pool DRAIN With Non-Slip Top

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2-3-4"	\$30.00	\$46.80	\$57.60	28

Caulk outlet available; outlet dimension approximately 1 1/2" longer.

Grit top eliminates danger of slipping when wet. Particularly desirable around pool edge and adjacent areas. Adjustable head. Flashing provision if desired.



Z-807—I.P.S. Outlet

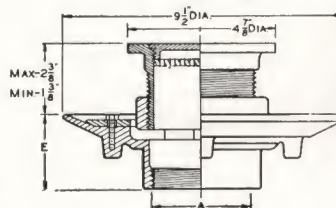
FIG. Z-808 Antiseptic Foot Bath DRAIN With Solid Screwed Top

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	— Add for — Chrome Top	Locking Device	Spanner Wrench	Pipe Size E
2-3-4"	\$29.30	\$39.60	\$44.80	\$3.80	\$7.50	\$2.00	2" 2 1/2"
3"-4"							2 3/4"
Clamping collar deduct }	1.50	2.70	4.00				

Approx. Wt. Lbs. 2"-3"-4"—15.

Caulk outlet available; "E" dimension approximately 1 1/2" longer.

Strainer head has non-slip water tight top for retaining antiseptic foot bath water. By removing top, quick drainage is provided through the secondary strainer so that the foot bath can be scoured easily.



I.P.S. Outlet



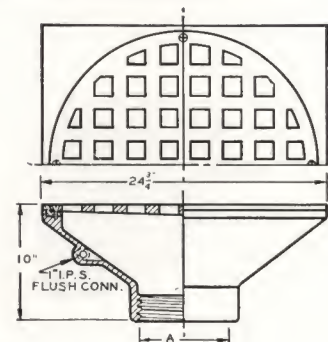
Z-808

FIG. Z-808A Zoo Or Animal Den DRAIN With Flushing Connection

Pipe Size A	Bronze Top and Grate Coated (CB)	Galv. (GB)	C. P. Top	Add for W. M. Top	Approx. Wt. Lbs.
3 to 8"	\$132.80	\$175.50	\$25.60	\$44.80	115

Caulk outlet available; body height dimension the same.
Perforated top available.

Large drainage area assures rapid discharge. Flushing connection serves as a washdown for accumulations.

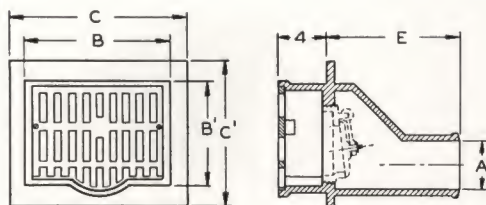


Z-808A—I.P.S. Outlet



Pool Or Pit DRAIN

FIG. Z-809



Z-809—Caulk Outlet

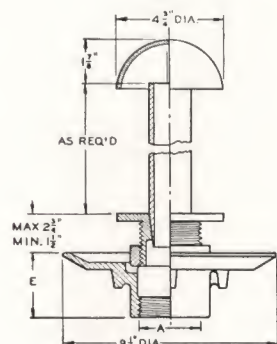
Pipe Size	Coated (DC)	Galv. (G)	Coated (CB)	Galv. (GB)	Add for Back Water Valve	Approx. Wt. Lbs.
A						
2-3-4"	\$20.60	\$30.90	\$36.60	\$56.30	\$12.80	48
5-6"	26.20	39.50	47.40	72.80	19.20	55
Clamping collar, add—small	7.70	9.60				
large	8.80	11.20				
Pipe Size	B	B'	C	C'	E	
A						
2-3-4"	9 $\frac{3}{8}$ "	7"	13"	11"	9"	
5-6"	11 $\frac{1}{8}$ "	8 $\frac{1}{2}$ "	14 $\frac{5}{8}$ "	12"	9 $\frac{1}{2}$ "	
I. P. S. outlet available.						

I. P. S. outlet available.

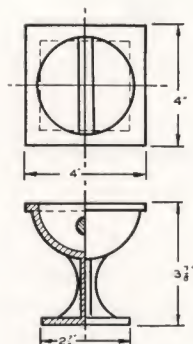
Excellent for wall drainage in pools or any other installation at low sewer level. Backwater valve optional but usually desirable. Anchorage flange.

POOL DRAIN And Overflow Connection - bronze

FIG. Z-809A



Z-809A—I.P.S. Outlet



Z-809B

Pipe Size	Height	E	Pol.	C. P.	Approx. Wt. Lbs.
A					
2"	6"	2 $\frac{1}{2}$ "	\$40.80	\$53.30	20
For each additional inch in height add			1.40	3.40	
3"	6"	2 $\frac{3}{4}$ "	50.40	65.30	22
For each additional inch in height add			2.00	4.00	

Note: Lists cover complete drain.

Caulk outlet available; "E" dimension approximately 1 $\frac{1}{2}$ " longer.

LANE MARKER - bronze

FIG. Z-809B

Pol.
\$13.60C. P.
\$18.70Approx.
Wt. Lbs.
6

These and many other special pool accessories are available.

Swimming Pool Discharge DRAIN, Angle Type Reversible

FIG. Z-810



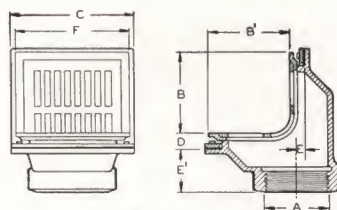
Z-810

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Strainer Coated (CB)	Galv. (GB)
A					
2-3-4"	\$27.00	\$36.30	\$ 72.60	\$39.80	\$ 51.70
4-5-6"	55.20	77.60	147.60	72.00	96.80

Add to (CB) and (GB) Lists for

Pipe Size	C. P.	W. M.
A		
2-3-4"	\$10.20	\$12.80
4-5-6"	15.40	16.00

Pipe Size	B	B'	C	D	E	E'	F	Approx. Wt. Lbs.
A								
2"	5"	5"	7 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	+1 $\frac{5}{16}$ "	2 $\frac{3}{4}$ "	7"	18
3"	5"	5"	7 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	+1 $\frac{9}{32}$ "	2 $\frac{3}{4}$ "	7"	19
4"	5"	5"	7 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	+ $\frac{3}{4}$ "	2 $\frac{3}{4}$ "	7"	20
4"	7"	7"	12 $\frac{5}{8}$ "	1 $\frac{1}{4}$ "	+ $\frac{15}{16}$ "	3 $\frac{1}{2}$ "	11 $\frac{3}{4}$ "	65
5"	7"	7"	12 $\frac{5}{8}$ "	1 $\frac{1}{4}$ "	+ $\frac{9}{32}$ "	3 $\frac{1}{2}$ "	11 $\frac{3}{4}$ "	66
6"	7"	7"	12 $\frac{5}{8}$ "	1 $\frac{1}{4}$ "	— $\frac{1}{4}$ "	3 $\frac{1}{2}$ "	11 $\frac{3}{4}$ "	67

Caulk outlet available; "E'" dimension approximately 1 $\frac{1}{2}$ " longer.

I.P.S. Outlet

Angle face serves as overflow; assures continuous drainage even though leaves, paper, etc. may clog the bottom surface of the pool drain. Outlet may be made either vertically or horizontally.

FIGS. Z-820-822 Swimming Pool GUTTER DRAINS -bronze

FIG. Z-820

Pipe Size	A	B	E	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1 1/2"-2"	2 1/4"x3 3/4"	2 3/4"	\$ 7.20	\$ 8.80	\$ 9.60	2	
2-3"	2 3/4"x5 1/2"	2 1/2"	11.20	13.30	14.40	3	

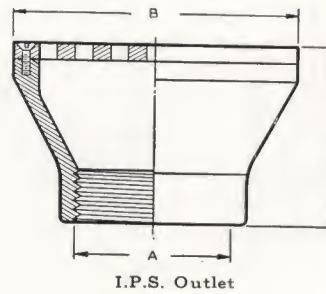


FIG. Z-821

Pipe Size	A	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1 1/2"-2"		\$11.20	\$13.80	\$14.40	3

FIG. Z-822

Pipe Size	A	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1 1/2"-2 1/2"		\$13.60	\$16.20	\$18.00	5

For any type of narrow gutter drainage.

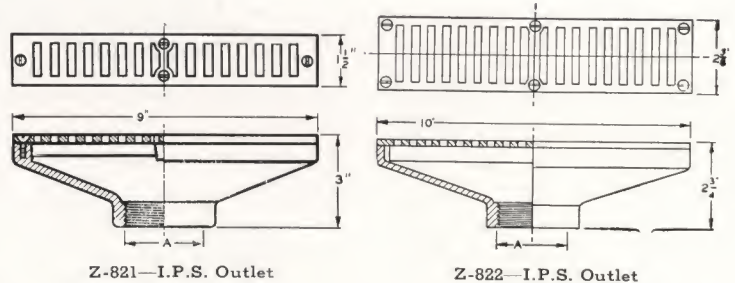


FIG. Z-823 Swimming Pool GUTTER DRAIN

Pipe Size	With Bronze Strainer			Add for		Approx.
A	Coated	Galv.	All Bronze	C. P.	W. M.	Wt. Lbs.
2-3"	\$12.00	\$17.30	\$24.00	\$3.60	\$5.60	8

Caulk outlet available; body height dimension approximately 1 1/2" longer.

Practical for walks, driveways, and other narrow installations.

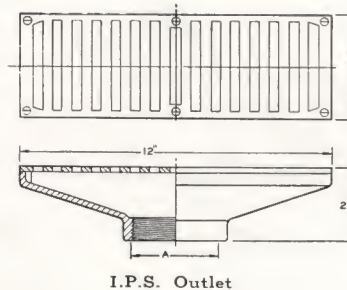


FIG. Z-825 and Z-825A Swimming Pool GUTTER DRAINS-bronze

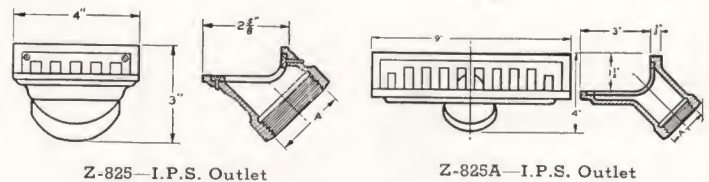
FIG. Z-825

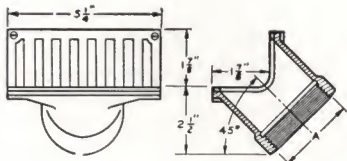
Pipe Size	A	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1-1 1/2"-2"		\$ 8.80	\$12.00	\$15.20	2

FIG. Z-825A

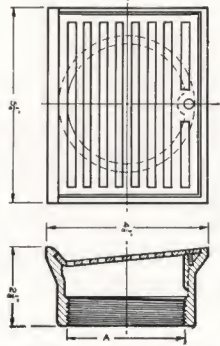
Pipe Size	A	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1 1/2"-2-3"		26.40	34.40	42.80	9

Vertical faces serve as overflows.





Z-826—I.P.S. Outlet



Z-827—I.P.S. Outlet

Swimming Pool GUTTER DRAINS

FIG. Z-826-827

FIG. Z-826

Pipe Size

A
1 1/2-2-2 1/2"Pol.
\$10.40C. P.
\$14.20W. M.
\$14.60Approx.
Wt. Lbs.
4

FIG. Z-827

2-2 1/2-3"

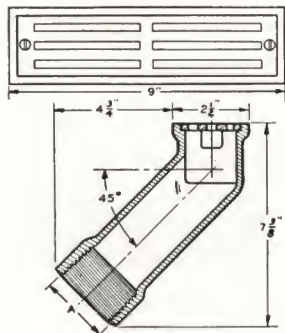
12.80

16.00

18.80

5

Vertical faces serve as overflows.



Z-830—I.P.S. Outlet

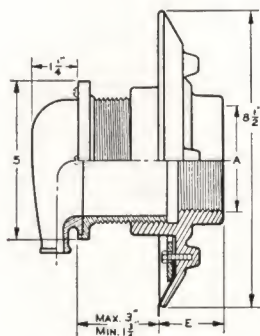
Swimming Pool GUTTER DRAIN

FIG. Z-830

Pipe Size

A
1 1/2-2"Pol.
\$16.80C. P.
\$18.40W. M.
\$19.20Approx.
Wt. Lbs.
7

Angle outlet simplifies installation.



Z-835—I.P.S. Inlet

Swimming Pool SPRAY INLET

FIG. Z-835

Pipe Size

A

1 1/2-2"

3"

4"

E

2 1/2"

2 3/4"

2 3/4"

Coated
(DC)

\$17.60

19.20

20.80

Galv.
(G)

\$23.00

25.90

28.80

All Bronze
(BR)

\$24.00

26.40

28.80

C. P.
add

\$4.80

4.80

4.80

W. M.
add

\$8.00

8.00

8.00

Approx.
Wt. Lbs.

12

13

14

Clamping collar add

1.50

2.70

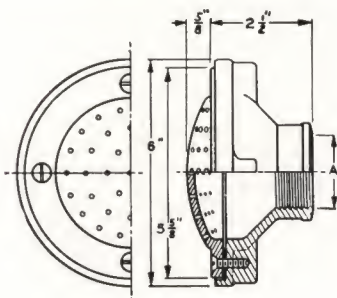
4.00

Caulk outlet available; "E" dimension approximately 1 1/2" longer.

For swimming pool circulating inlets above water level. Flashing provision guards against leakage.

Wading Pool SPRAY INLET

FIG. Z-837



Z-837—I.P.S. Inlet

Pipe Size

A

1 1/2"

Plain
Bronze

\$20.00

Polished
Bronze

\$22.40

Add for
C. P.
Top

\$4.40

Approx.
Wt. Lbs.

3

Balanced face perforations provide uniform spray. Face removable for cleaning.

FIG. Z-838 Children's Play Pool Spray HEAD

Pipe Size				Approx.
A	Polished Bronze	Add for C. P. Dome		Wt. Lbs.
2"	\$128.00	\$20.00		33

Pressure reducing chamber behind balanced face perforations enables children to play directly on the face without harm. Face removable for cleaning. Angle body design with concrete anchors provide rigid installation.

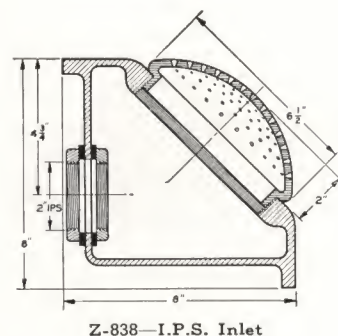


FIG. Z-839 Swimming Pool SPRAY INLET

Pipe Size			Approx.
A	Polished Bronze	Add for C. P.	Wt. Lbs.
2"	\$59.20	\$8.00	11

Provides uniform spray under balanced pressure.

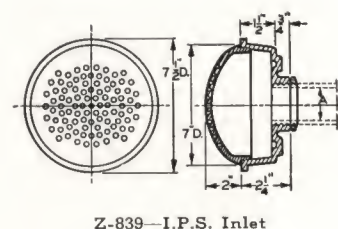


FIG. Z-840 Swimming Pool FLUSHING INLET

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	C. P. add	W. M. add	Approx. Wt. Lbs.
A						
1½-2-2½"	\$21.00	\$27.90	\$32.80	\$1.60	\$2.40	12
Less clamping collar deduct	1.50	2.70	4.00			
Spray heads only			15.20			

For swimming pool surface flushing and recirculating inlets at water level. Diverging spray flushes surface of pool; supplies clean water for circulation. Has flashing provision.

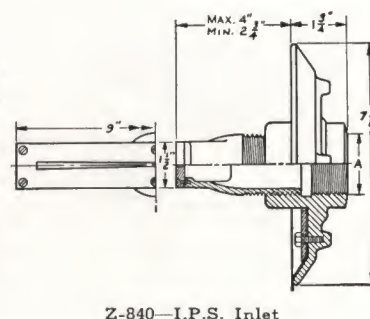
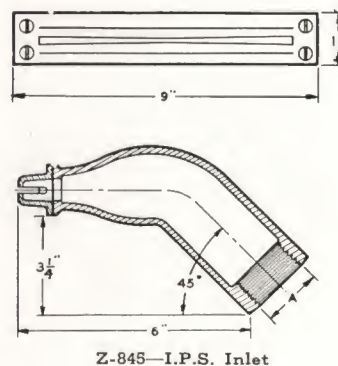


FIG. Z-845 Swimming Pool FLUSHING INLET

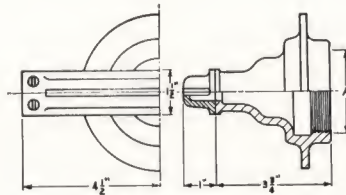
Pipe Size	Pol. Bronze	C. P.	W. M.	Approx. Wt. Lbs.
A				
1½-2-2½"	\$21.00	\$24.80	\$26.20	7

For same service as Z-840.





Z-850



I.P.S. Inlet

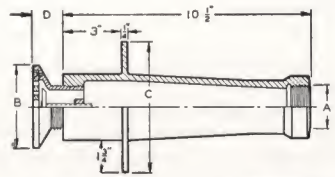
Swimming Pool FLUSHING INLET - bronze**FIG. Z-850**

Pipe Size A	Pol.	C. P.	W. M.	Approx. Wt. Lbs.
1½-2-2½"	\$14.00	\$15.60	\$18.00	6

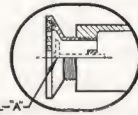
For same service as Z-845. Has anchorage provision.



Z-855



I.P.S. Outlet

Flow Regulat-
ing Device**Swimming Pool RECIRCULATING FITTING****FIG. Z-855**

Pipe Size A	Coated (DC)	Galv. (G)	All Bronze (BR)	C. P. add	W. M. add	Approx. Wt. Lbs.
1½-2"	\$13.60	\$19.20	\$28.80	\$2.00	\$ 3.00	14
3"	18.60	25.10	42.40	2.60	4.00	22

Clamping collar add 1.60 2.90 4.00

Add for detail "A" when used with

Z-855 Inlet Body			
1½-2"	6.40	7.40	9.60
3"	9.60	11.20	14.40

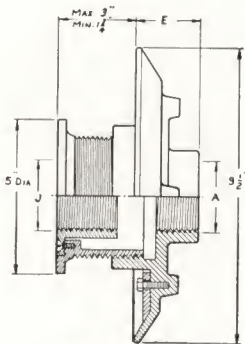
Detail "A" flow regulating device only

1½-2"	13.40	13.40	16.00
3"	20.60	22.20	24.00

Pipe Size A	B	C	D
1½-2"	4"x4"	6¾"	1"-2"
3"	6"x6"	8"	1"-2"

Hub or spigot connections available.

Detail "A" shows flow regulating device. Long body extends through wall. Anchorage flange provided.



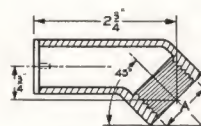
Z-865—I.P.S. Outlet

Swimming Pool Vacuum Cleaning Connection**FIG. Z-865**

Pipe Size A	E	J	Coated (DC)	Galv. (G)	All Bronze (BR)	C. P. add	W. M. add	Approx. Wt. Lbs.
1½-2"	2½"	1½"-2"	\$16.80	\$22.10	\$24.80	\$2.10	\$3.20	13
3"	2¾"	1½"-2"	18.40	24.00	28.80	2.10	3.20	14
4"	2¾"	1½"-2"	20.00	26.90	31.20	2.10	3.20	15

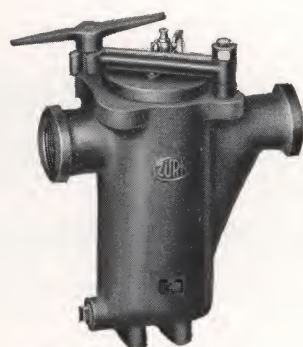
Clamping collar add 1.50 2.70 4.00
Plug add 1.60 1.60 1.60**CHLORINE SPRAY INLET - bronze****FIG. Z-895**

Z-895—I.P.S. Inlet

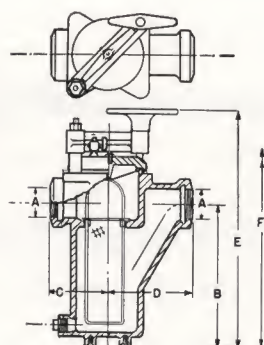


Pipe Size A	Pol. Face	C. P. add	W. M. add	Approx. Wt. Lbs.
½-¾-1"	\$19.80	\$2.80	\$4.00	2

An inexpensive manner of introducing chlorine into pool.



Z-900



I.P.S. Inlet and Outlet

SWIMMING POOL HAIR INTERCEPTOR, Cast Iron

FIG. Z-900

Pipe Size	A	B	C	D	E	F	Coated (DC)	Galv. (G)
2"	9 3/16"	3 3/4"	5 1/2"	15 7/8"	21 1/4"		\$117.00	\$152.10
3"	12 1/4"	5 1/2"	7 1/2"	17 3/4"	26 1/8"		117.00	152.10
4"	16 7/8"	7 1/8"	10 5/8"	25 5/8"	36 1/8"		117.00	152.10

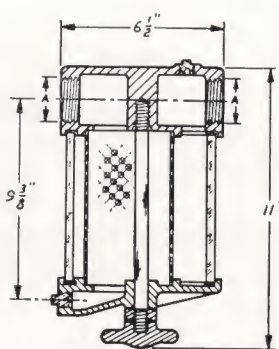
Approx. Wt. Lbs. 2"—50, 3"—80, 4"—95.

"F" dimension—space required for basket removal

Clamp cover provides quick opening and closing. Tested for 250 lbs. pressure for working pressures of 125 lbs. Furnished with air relief valve. Bottom cleanout.



Z-902



I.P.S. Connections

SWIMMING POOL HAIR INTERCEPTOR

FIG. Z-902

Pipe Size	All Bronze (BR)
A	
1 1/2"	\$70.00

Approx. Wt. Lbs. 16

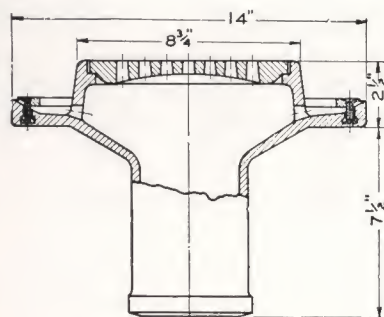
Spare Basket \$20.00; Spare Tube \$20.00

Screen and condition of fluid readily examined through lucite tube. Screen set eccentrically with respect to body minimizes pressure drop. Interceptor is supportable in pipe line in any position. Flow may be in either direction through it. Interceptor may be completely disassembled for cleaning and is therefore sanitary. Cleanouts at top and bottom so interceptor may be drained prior to cleaning. Open area ratio 11:1.

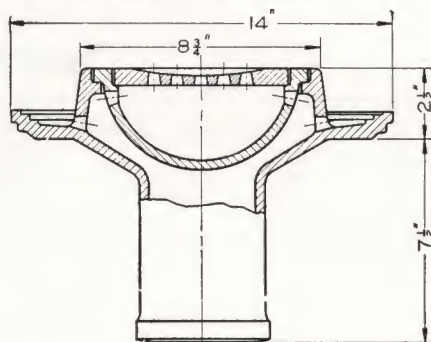
ACID RESISTING PRODUCTS

HI-SIL

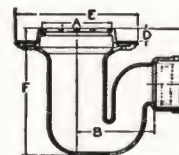
Acid Resisting Floor Drains



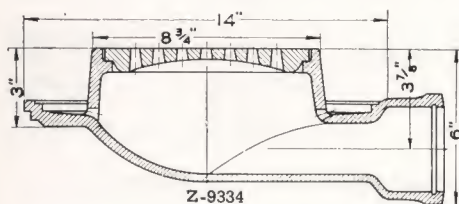
Z-5501



Z-5687



Z-7081 & Z-9058

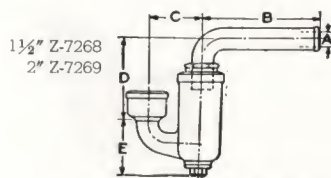


Z-9334

Fig. No.	Size Outlet Inches	Wt. Lbs.	Price With Strainer	Extra Strainer Price	A In.	B In.	C In.	D In.	E In.	F In.	Flashing Ring
Z-5500	2-3-4-6	45	\$42.00	\$7.50							No
Z-5501	2-3-4-6	45	64.50	7.50							Yes
Z-7081-A	1 1/2	35	49.20	4.10	4	6 1/2	3 3/8	1 1/2	10 3/8	9	No
Z-9058-B	2	37	49.20	4.10	4	6 1/2	3 3/8	1 1/2	10 3/8	9	No
Z-9058-3	3	70	120.00	7.50	8	9	5 3/8	1 1/2	14	14 1/2	No
Z-9058-4	4	73	120.00	7.50	8	9	5 3/8	1 1/2	14	14 1/2	No
Z-5687	2-3-4-6	53	60.00	7.20							No
Z-5687-A	2-3-4-6	53	79.00	7.20							No
Z-9334	2	37	58.00	7.50							Yes
											No



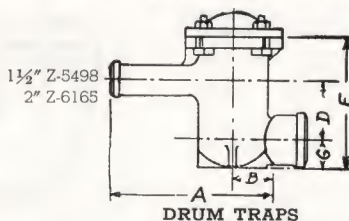
Hi-Sil Acid Resisting Traps



NON-SYPHON P TRAPS

Fig. No.	Size A Inches	Price	B In.	C In.	D In.	E In.
Z-7268	1½	\$28.40	8	4½	6¾	5¼
Z-7269	2	33.60	8	5½	6	9

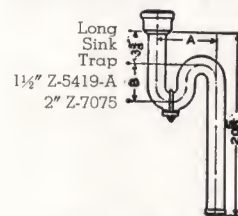
Approx. Wt. Lbs. Fig. No. Z-7268—18, Fig. No. Z-7269—31.



DRUM TRAPS

Fig. No.	Size In.	Price	A In.	B In.	D In.	E In.	G In.
Z-5498	1½	\$57.65	11	2¾	4	9¾	2¾
Z-6165	2	58.55	11½	2¾	4½	10¾	2¾

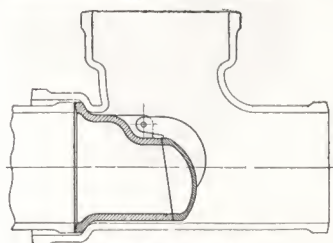
Approx. Wt. Lbs. Fig. No. Z-5498—28, Fig. No. Z-6165—31.



LONG SINK TRAPS

Fig. No.	Size Inches	Price	A In.	B In.
Z-5419-A	1½	\$22.00	6¾	4¼
Z-7075	2	26.00	7¾	5

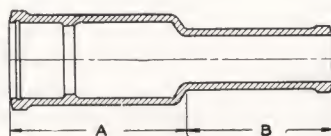
Approx. Wt. Lbs. Fig. No. Z-5419-A—12, Fig. No. Z-7075—27.

ACID RESISTING BACKWATER VALVES
PALMER TYPE

Size Inches	Price
3	\$25.00
4	47.00
6	89.00
8	98.00

Price does not include tee.

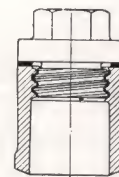
Hi-Sil Acid Resisting Miscellaneous Products



Z-5045, Z-5070, Z-5095 and Z-5144

ACID RESISTING INSERTABLE JOINTS

Fig. No.	Size, Inches	A—Inches	B—Inches	Price	Weight, Lbs.
5045	2	7¾	6½	\$7.50	11
5070	3	8¾	7¾	9.80	16
5095	4	9½	7¾	14.90	22
5144	6	9½	7¾	25.20	30



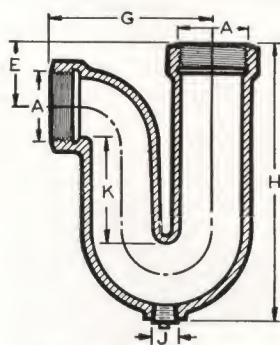
ACID RESISTING CLEANOUT PLUGS

Size Inches	Weight Pounds	Price
1½	2¾	\$3.95
2	3½	4.70
3	6½	7.90
4	11	14.20
6*	14	19.55

*With bolted cover.

All Prices, Hi-Sil Acid Resisting Products, F.O.B. Erie, Pa. (No Freight Allowed)

TRAPS AND VALVES . . . Pages 53 to 63



Z-1000—I.P.S. Outlet

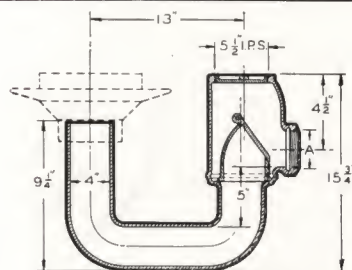
DEEP SEAL "P" TRAP

FIG. Z-1000

Pipe Size A	E	G	H	I	K	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1¼"	2"	4¼"	6⅞"	¾" I.P.	2½"	\$ 5.60	\$ 9.00	\$16.00	2
1½"	2⅝"	4¾"	7⅝"	¾" I.P.	2½"	6.20	10.60	17.60	3
2"	3¼"	6¼"	9½"	1¼" I.P.	4"	6.70	11.50	19.20	8
3"	3"	7½"	13"	1¼" I.P.	5"	10.60	17.00	25.60	17
4"	4"	9½"	15½"	1¼" I.P.	5"	16.00	26.90	40.00	33

For bronze cleanout plug add 1.60

Designed for use with floor and area drains.



Z-1005—I.P.S. Outlet

DEEP SEAL TRAP WITH FLOOR LEVEL CLEANOUT

FIG. Z-1005

Pipe Size A	Coated (DC)	Galv. (G)	If Backwater Device not Required, Deduct	Approx. Wt. Lbs.
2"	\$31.50	\$43.20	\$ 6.40	60
3"	49.50	66.60	9.60	70
4"	57.00	77.40	12.80	80

Drain not included in above prices.

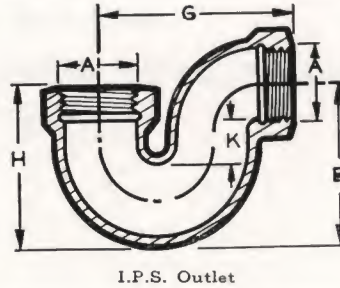
Regularly furnished with backwater device. For use with any type floor or area drain.

FIG. Z-1010 SHALLOW SEAL "P" TRAP

Pipe Size					Coated	Galv.	All Bronze
A	E	G	H	K	(DC)	(G)	(BR)
1¼"	3⅝"	4⅝"	3⅝"	1½"	\$1.50	\$ 2.30	\$ 4.80
1½"	3⅞"	4¾"	3⅞"	1½"	1.80	2.70	5.60
2"	5⅜"	5⅞"	4¼"	2"	2.30	3.60	6.40
3"	7"	7"	8"	2"	5.40	7.60	16.00
4"	7½"	9¾"	5½"	1"	9.00	14.40	28.80

For brass cleanout, add
Approx. Wt. Lbs. 1 1/4"—2 1/2", 1 1/2"—3, 2"—5, 3"—13, 4"—35.

For use with any type floor drain where space limitation is important.



Z-1010

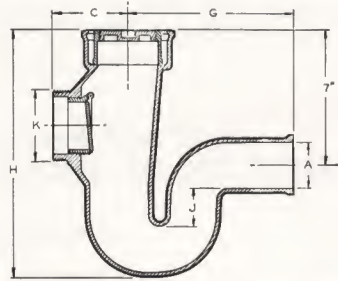
FIG. Z-1015 COMBINED TRAP, B.W. SEWER VALVE AND

CLEANOUT

Pipe Size	A	C	G	H	J	K	Coated (DC)	Backwater Valve, if not desired
3"	5 1/4"	11 1/4"	15 7/8"	4"	4"	\$30.00	\$ 9.00	
4"	4 3/4"	13"	18"	4"	5"	35.00	12.00	

Approx. Wt. Lbs. 3"—35, 4"—42.

For use with any type floor or area drain.



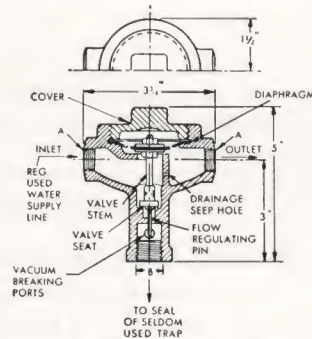
Z-1015

FIG. Z-1021 AUTOMATIC TRAP-PRIMER

Furnished with 1/2" or 3/4" I. P. Connections—\$10.00
Union Connection—Price on Application
To provide any Drain with Primer Connection, add to list prices \$2.50
Approx. Wt. Lbs. 2

Provides the only means of maintaining proper and constant seal in basement floor drain traps and other traps used infrequently. Seldom used traps tend to lose their seals by evaporation. Primer is installed in a frequently used water supply line, and connected to the trap. (See dimensional diagram to the right) Flow is from left to right; water enters the primer, forces the diaphragm upward, and opens the valve, allowing water to replenish the trap seal. The diaphragm, with flat valve seat, insures that "liming" and other hard water deposits will not freeze the plunger. Tapered flow regulator pin meters the water—as pressure increases, the pin rises, reducing the flow.

Prevents foul and unsanitary sewer odors from entering the building. Complies with all modern plumbing and sanitary codes.



"A"—1/2", 3/4" "B"—1/2"
Width—I.P.S.—3 3/4" Union Conn.—6 3/4"

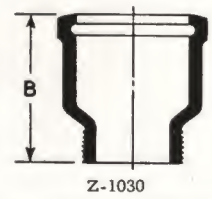


Z-1021—I. P. Connection Patented

FIG. Z-1030 PIPE ADAPTER

Iron Pipe to Soil Hub

Pipe Size	B	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	4"	\$ 2.00	\$ 3.00	\$ 4.90	3
3"	4 1/2"	2.80	4.20	7.00	5
4"	4 3/4"	4.20	6.30	10.50	6
5"	4 1/4"	5.30	8.80	13.20	8
6"	4 1/4"	6.30	10.20	15.80	9
8"	4 1/4"	9.00	13.50	22.40	15

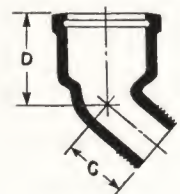


Z-1030

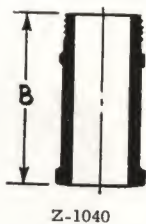
FIG. Z-1035 PIPE ADAPTER—45°

Iron Pipe to Soil Hub

Pipe Size	C	D	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	2"	3"	2.50	\$ 3.60	\$ 5.70	4
3"	2 3/8"	4"	3.40	5.00	8.00	6
4"	3"	4 1/2"	4.90	7.30	12.00	7
5"	2 1/2"	3 3/4"	6.30	10.00	15.00	9
6"	2 1/2"	3 3/4"	7.50	11.70	18.00	12
8"	4"	5 5/8"	10.00	15.50	26.20	20



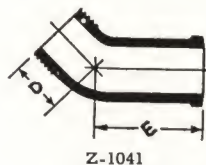
Z-1035


PIPE ADAPTER

Iron Pipe to Soil Spigot

FIG. Z-1040

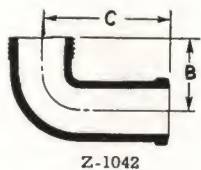
Pipe Size	B	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	6 1/2"	\$1.30	\$ 2.00	\$ 3.10	2
3"	6 1/2"	1.80	2.80	4.40	4
4"	6 1/2"	2.70	4.70	7.00	6
5"	6 1/2"	3.70	6.50	9.80	8
6"	6 1/2"	4.80	8.30	12.60	10
8"	6 1/2"	7.90	13.90	21.00	17


PIPE ADAPTER—45°

Iron Pipe to Soil Spigot

FIG. Z-1041

Pipe Size	D	E	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	2"	6"	\$2.10	\$ 3.50	\$ 5.60	3
3"	2 1/2"	6"	3.20	5.50	8.40	7
4"	2 3/4"	6"	4.80	8.30	12.60	10
5"	3"	6"	5.80	10.20	15.40	12
6"	3 1/2"	6"	7.40	12.80	19.60	16


PIPE ADAPTER—90°

Iron Pipe to Soil Spigot

FIG. Z-1042

Pipe Size	B	C	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	2 3/4"	6"	\$ 2.70	\$ 4.70	\$ 7.00	5
3"	3 3/4"	7"	3.90	6.70	10.50	8
4"	4"	8"	6.90	11.90	18.20	14
5"	5"	8 1/2"	8.40	14.70	22.40	16
6"	5 1/2"	9"	10.00	17.40	26.60	17

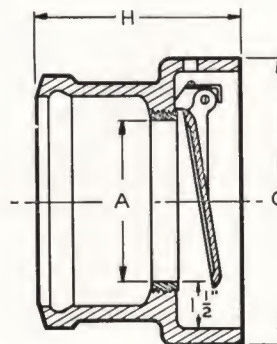

BACKWATER VALVE
FIG. Z-1090

Pipe Size	A	B	E	G	J	K	Coated (DC)	Approx. Wt. Lbs.
2"		4 1/8"	4 1/2"	7"	5"	27 5/8"	\$ 18.00	23
3"		5 1/4"	5 1/2"	7 7/8"	6"	35 3/8"	22.50	30
4"		6 1/8"	5 5/8"	8 1/2"	6 5/8"	41 1/8"	31.50	34
5"		7 1/4"	6 1/8"	9 1/2"	7 3/16"	45 5/8"	46.50	50
6"		8 5/16"	6 5/8"	10"	7 3/4"	51 5/8"	54.00	57
8"		10"	6 7/8"	11 3/4"	9 1/2"	63 5/8"	90.00	79
10"		12 1/2"	8"	12 7/8"	10 3/4"	73 5/8"	216.00	102
12"		14 3/8"	9 5/8"	13 3/8"	11 3/4"	9"	270.00	180
15"		16 3/4"	10 3/4"	17 1/2"	14 3/4"	10 3/4"	594.00	325
18"	Dimensions on request						738.00	
24"	Dimensions on request						1350.00	
30"	Dimensions on request						3060.00	

Non-fouling swing gate and clean sweep waterways. For main sewer lines in buildings to protect from back flow of sewage or heavy rainfall.

FIG. Z-1091 BACKWATER VALVE—OPEN TYPE

Pipe Size			C.I. Body and Bronze Valve Assembly	With Flanged Ends	Approx. Wt. Lbs.
A	C	H			
2"	5½"	4½"	\$ 14.40	\$ 17.30	10
3"	6½"	5"	18.00	21.60	12
4"	7½"	5"	25.20	30.30	15
5"	8½"	5¼"	37.50	45.00	20
6"	9½"	5¼"	43.20	51.90	23
8"	11½"	6"	72.00	86.40	42
10"	13½"	7"	172.80	207.40	58
12"	15½"	8½"	216.00	266.40	70
15"	17½"	12½"	475.20	570.30	120
18"	Dimensions on request		590.40	708.50	
24"	Dimensions on request		1080.00	1286.00	
30"	Dimensions on request		2440.80	2936.60	



Z-1091

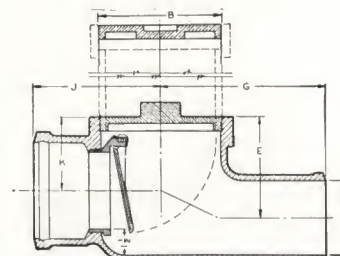
Soil Pipe Connection

For use in a manhole at end of sewer line, settling basins, etc., as protection against tidewater and flood.

FIG. Z-1095 BACKWATER VALVE

Pipe Size	Coated (DC)	Approx. Wt. Lbs.	Pipe Size	Coated (DC)	Approx. Wt. Lbs.
A			A		
2"	\$ 29.70	23	5"	\$ 72.00	50
3"	35.10	30	6"	79.20	57
4"	43.20	34	8"	118.80	79
			10"	270.00	102
			12"	345.00	180

Pipe Size	B.I.P.S.	E	G	J	K
A					
2"	4"	4"	7"	5"	27⅞"
3"	5"	4⅝"	7⅞"	6"	35⅝"
4"	6"	5⅞"	8½"	6⅝"	41⅞"
5"	7"	5⅝"	9½"	7⅝"	45⅝"
6"	8"	7⅞"	10"	7¾"	51⅞"
8"	10"	7⅞"	11¾"	9½"	63⅞"
10"	12"	8"	12⅞"	10¾"	73⅞"
12"	14"	9⅝"	13⅝"	11¾"	9"



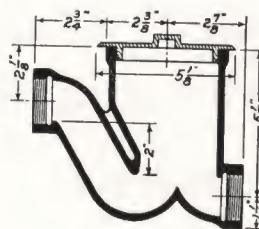
Z-1095

For same service as Z-1090. Bronze removable cover provides extension of cleanout in deep sewers to floor level.

FIG. Z-1100 RESIDENCE AND APARTMENT HOUSE BATH TRAP SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	\$5.40	\$8.30	\$12.20	9

Unique design causes swirling current which washes inside walls and completely changes the water seal with each discharge from the tub. Full depth of water seal guards the cover from foul odors from the sewer line. No back siphonage. Extra large cleanout.

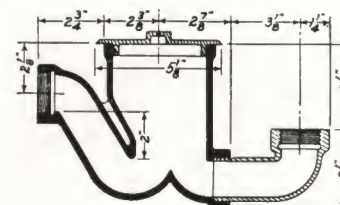


Z-1100

FIG. Z-1101 RESIDENCE AND APARTMENT HOUSE BATH TRAP SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	\$6.60	\$10.70	\$16.00	11

Unique design causes swirling current which washes inside walls and completely changes the water seal with each discharge from the tub. Full depth of water seal guards the cover from foul odors from the sewer line. No back siphonage. Extra large cleanout.



Z-1101

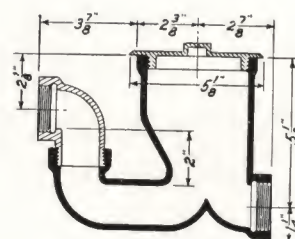
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FIG. Z-1110 FEDERAL HOUSING ADJUSTABLE BATH TRAP SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	\$ 6.30	\$ 9.90	\$15.40	13

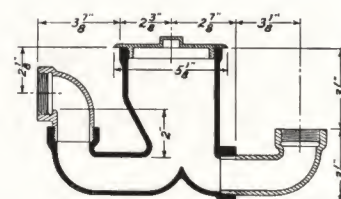
Unique design causes swirling current which washes inside walls and completely changes the water seal with each discharge from the tub. Full depth of water seal guards the cover from foul odors from the sewer line. No back siphonage. Extra large cleanout.



Z-1110

FIG. Z-1111 FEDERAL HOUSING ADJUSTABLE BATH TRAP SELF-CLEANING

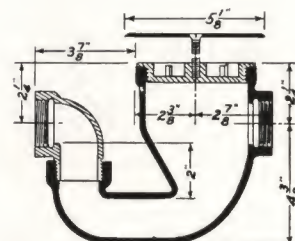
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	\$ 7.60	\$12.40	\$19.20	14



Z-1111

FIG. Z-1115 FEDERAL HOUSING ADJUSTABLE BATH TRAP SELF-CLEANING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1½"	\$ 8.70	\$12.70	\$17.90	13

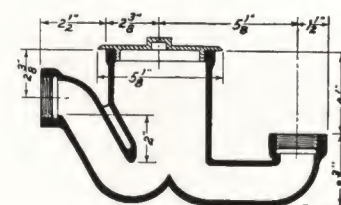


Z-1115

FIG. Z-1120 HOTEL TUB AND SHOWER TRAP SELF-CLEANING, RAPID FLOWING

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	\$ 8.30	\$12.60	\$20.80	20

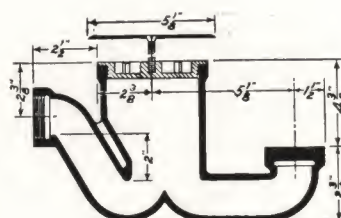
Designed especially to carry off drainage discharge rapidly with minimum fouling. Incorporates same features as in Z-1100.



Z-1120

FIG. Z-1121 HOTEL TUB AND SHOWER TRAP SELF-CLEANING, RAPID FLOWING

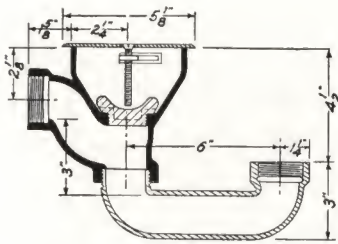
Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
2"	\$10.00	\$14.80	\$22.70	20



Z-1121

(Continued on following page)

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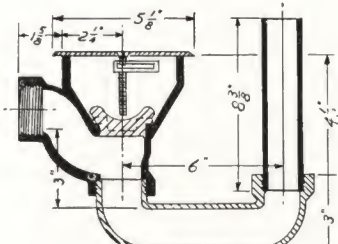
Z-1125

**COLLECTIVE DWELLINGS BATH TRAP
UNIVERSAL ADJUSTMENT**

FIG. Z-1125

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1 1/2"	\$ 5.40	\$10.70	\$16.80	7

Adjustable inlet—swivel return bend; any lateral direction. Adjustable outlet—any lateral direction. Adapters supplied for lead or soil pipe.

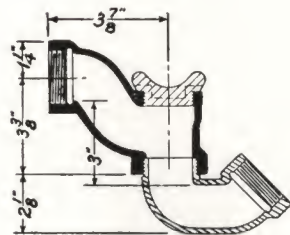


Z-1126

**COLLECTIVE DWELLINGS BATH TRAP
UNIVERSAL ADJUSTMENT**

FIG. Z-1126

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1 1/2"	\$ 8.60	\$14.20	\$18.90	8

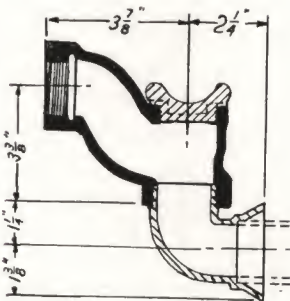


Z-1127

**COLLECTIVE DWELLINGS BATH TRAP
UNIVERSAL ADJUSTMENT**

FIG. Z-1127

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1 1/2"	\$4.20	\$8.30	\$12.90	4

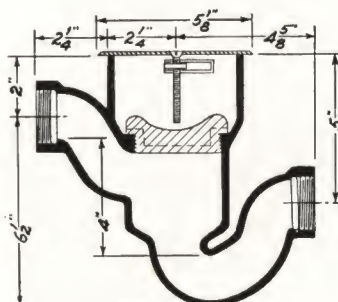


Z-1128

**COLLECTIVE DWELLINGS BATH TRAP
UNIVERSAL ADJUSTMENT**

FIG. Z-1128

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1 1/2"	\$ 5.90	\$ 9.00	\$15.00	3



Z-1130

**HOSPITAL BATH TRAP
SELF-CLEANING, NON-SIPHONING**

FIG. Z-1130

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Approx. Wt. Lbs.
1 1/2"	\$ 7.60	\$14.40	\$24.10	9

Severest siphonic pull will not drain water seal. Self-cleansing of all inside walls. Water seal guards cleanout plug against foul odors.

(Continued on following page)

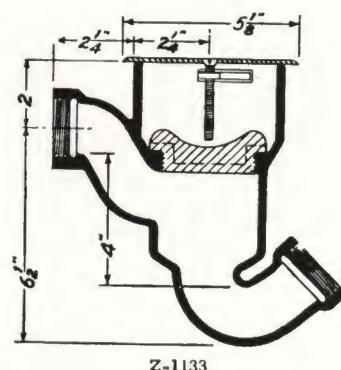
(Continued from preceding page)

FIG. Z-1133 HOSPITAL BATH TRAP
SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)
1½"	\$ 7.50	\$14.40

All Bronze (BR)
\$24.10

Approx.
Wt. Lbs.
9



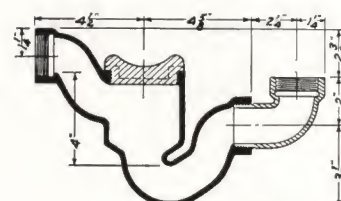
Z-1133

FIG. Z-1135 HOSPITAL BATH TRAP
SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)
1½"	\$ 7.20	\$16.00

All Bronze (BR)
\$25.50

Approx.
Wt. Lbs.
6



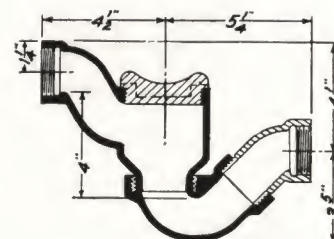
Z-1135

FIG. Z-1138 HOSPITAL BATH TRAP
SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)
1½"	\$ 7.20	\$16.00

All Bronze (BR)
\$25.50

Approx.
Wt. Lbs.
6



Z-1138

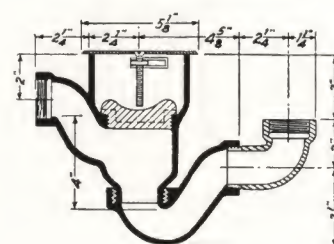
FIG. Z-1140 HOSPITAL ADJUSTABLE BATH TRAP
SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)
1½"	\$ 10.10	\$19.60

All Bronze (BR)
\$34.30

Approx.
Wt. Lbs.
10

Severest siphonic pull will not drain water seal. Self-cleansing of all inside walls. Water seal guards cleanout plug against foul odors.



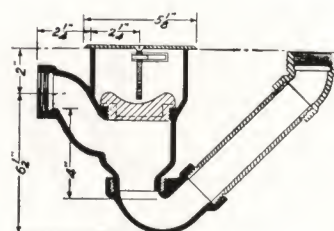
Z-1140

FIG. Z-1143 HOSPITAL ADJUSTABLE BATH TRAP
SELF-CLEANING, NON-SIPHONING

Pipe Size	Coated (DC)	Galv. (G)
1½"	\$10.10	\$19.60

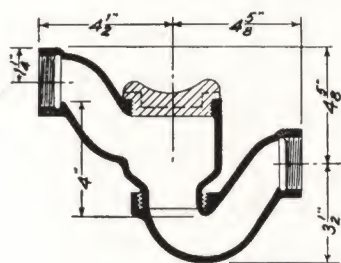
All Bronze (BR)
\$34.30

Approx.
Wt. Lbs.
11



Z-1143

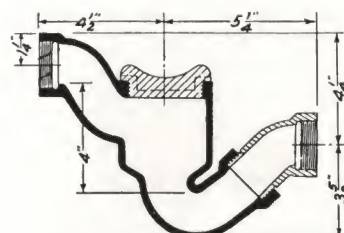
(Continued on following page)



Z-1145

Pipe Size
1 1/2"Coated
(DC)
\$ 7.50Galv.
(G)
\$16.20All Bronze
(BR)
\$25.60Approx.
Wt. Lbs.
6**HOSPITAL ADJUSTABLE BATH TRAP**
SELF-CLEANING, NON-SIPHONING

FIG. Z-1145



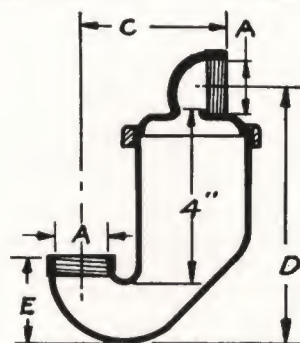
Z-1148

Pipe Size
1 1/2"Coated
(DC)
\$ 8.70Galv.
(G)
\$18.60All Bronze
(BR)
\$29.50Approx.
Wt. Lbs.
6**HOSPITAL ADJUSTABLE BATH TRAP**
SELF-CLEANING, NON-SIPHONING

FIG. Z-1148



Z-1160



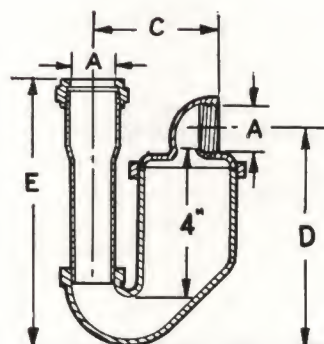
I.P.S. Inlet and Outlet

RESEALING LAVATORY TRAP

FIG. Z-1160

Pipe Size	A	C	D	E	Pol. Bronze	Chrome Pl. Bronze	Approx. Wt. Lbs.
1 1/4"		3 5/8"	6 1/8"	2"	\$10.20	\$12.90	3
1 1/2"		4 1/4"	6 5/8"	2 1/2"	11.70	15.00	4

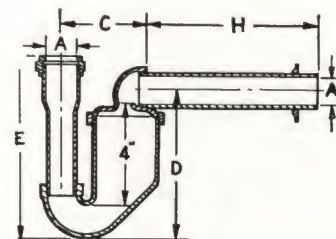
Severest siphonic pull will not drain water seal. Ground face union connection permits disconnection at any time with free access to trap or waste line. Self-cleansing of inside walls. Eliminates need for separate vent.



Z-1161—Tubing Inlet and I.P.S. Outlet

Pipe Size
A
1 1/4"
1 1/2"C
3 5/8"
4 1/4"D
6 1/8"
6 5/8"E
7"
7 3/8"Pol. Bronze
\$11.70
13.50Chrome Pl. Bronze
\$15.00
17.40Approx. Wt. Lbs.
3 1/2
4 1/2**RESEALING LAVATORY TRAP**

FIG. Z-1161



Z-1163—Tubing Inlet and Outlet

Pipe Size
A
1 1/4"
1 1/2"C
3 3/8"
4 1/4"D
6 1/8"
6 5/8"E
7"
7 3/8"H
7 3/4"
7 3/4"Pol. Bronze
\$13.50
16.20Chrome Pl. Bronze
\$16.20
19.50Approx. Wt. Lbs.
4
5**RESEALING LAVATORY TRAP**

FIG. Z-1163

(Continued on following page)

(Continued from preceding page)

FIG. Z-1164 RESEALING LAVATORY TRAP

Pipe Size A	C	D	E	G	Pol. Bronze	Chrome Pl. Bronze	Approx. Wt. Lbs.
1 1/4"	3 5/8"	25"	7"	2"	\$13.50	\$17.40	4
1 1/2"	4 1/4"	25"	7 3/8"	2"	16.20	21.20	5

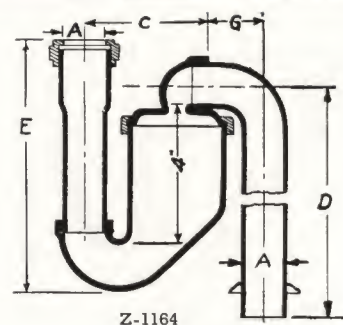


FIG. Z-1167 ADJUSTABLE BRONZE BATH TRAP

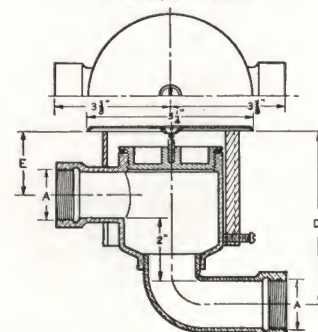
Pipe Size A	D Min.-Max.	E Min.-Max.	Approx. Wt. Lbs.
1 1/4" Iron Pipe, I.P.S. Inlet and Outlet	5 3/4"—8 1/2"	2"—4 3/4"	5
1 1/2" Iron Pipe, I.P.S. Inlet and Outlet	5 3/4"—8 1/2"	2"—4 3/4"	5



Z-1167, Z-1167-1

FIG. Z-1167-1 ADJUSTABLE BRONZE BATH TRAP

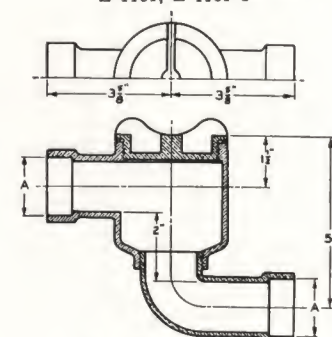
Pipe Size A	D Min.-Max.	E Min.-Max.	Approx. Wt. Lbs.
1 1/4" Iron Pipe—With Shield, I.P.S. Inlet and Outlet	5 3/4"—8 1/2"	2"—4 3/4"	7
1 1/2" Iron Pipe—With Shield, I.P.S. Inlet and Outlet	5 3/4"—8 1/2"	2"—4 3/4"	7



Z-1167, Z-1167-1

FIG. Z-1167L ADJUSTABLE BRONZE BATH TRAP

Pipe Size A	D Min.-Max.	E Min.-Max.	Approx. Wt. Lbs.
1 1/4" Lead Pipe, Hub Inlet and Outlet	5 3/4"—8 1/2"	2"—4 3/4"	5
1 1/2" Lead Pipe, Hub Inlet and Outlet	5 3/4"—8 1/2"	2"—4 3/4"	5



Z-1167L, Z-1167L-1

FIG. Z-1167L-1 ADJUSTABLE BRONZE BATH TRAP

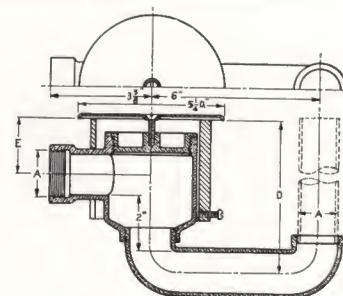
Pipe Size A	D Min.-Max.	E Min.-Max.	Approx. Wt. Lbs.
1 1/4" Lead Pipe—With Shield, Hub Inlet and Outlet	5 3/4"—8 1/2"	2"—4 3/4"	7
1 1/2" Lead Pipe—With Shield, Hub Inlet and Outlet	5 3/4"—8 1/2"	2"—4 3/4"	7

FIG. Z-1168 ADJUSTABLE BRONZE BATH TRAP

Pipe Size A	Approx. Wt. Lbs.
1 1/4" Iron Pipe Outlet, Tubing Inlet	6
1 1/2" Iron Pipe Outlet, Tubing Inlet	6

FIG. Z-1168-1 ADJUSTABLE BRONZE BATH TRAP

Pipe Size A	Approx. Wt. Lbs.
1 1/4" Iron Pipe Outlet, Tubing Inlet—With Shield	7
1 1/2" Iron Pipe Outlet, Tubing Inlet—With Shield	7

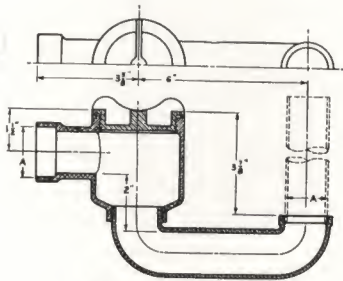


Z-1168, Z-1168-1

(Continued on following page)



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Z-1168L, Z-1168L-1

ADJUSTABLE BRONZE BATH TRAP

FIG. Z-1168L

Pipe Size A—1 1/4" Lead Pipe, Hub Outlet—Tubing Inlet.....	\$7.20	6
Pipe Size A—1 1/2" Lead Pipe, Hub Outlet—Tubing Inlet.....	7.80	6

Approx.
Wt. Lbs.

ADJUSTABLE BRONZE BATH TRAP

FIG. Z-1168L-1

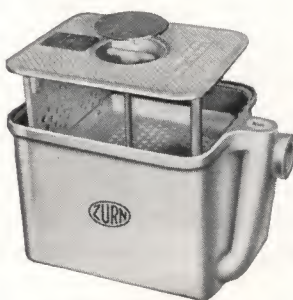
Pipe Size A—1 1/4" Lead Pipe, Hub Outlet, Tubing Inlet—With Shield.....	\$8.00	7
Pipe Size A—1 1/2" Lead Pipe, Hub Outlet, Tubing Inlet—With Shield.....	8.60	7

Approx.
Wt. Lbs.

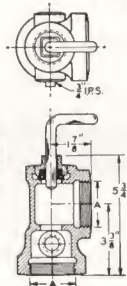
INTERCEPTORS . . . Pages 63 to 65

STANDARD MODEL CAST IRON GREASEPTOR With Patented Flow Control Fitting

FIG. Z-1170



Z-1170—Standard Greaseptor

Flow Control
TeeZ-1171—Deluxe—Cover Removable
With Basket

Size No.	**G.P.M. Rated Capacity	**Lbs. Grease Capacity
100	4	8
200	6	12
300	9	18
400	14	28
400LT	22	44
500	20	40
600	25	50
600LT	30	60
700	40	80

Furnished on all Sizes
and Types.

J I.P.S.	B	B'	C	D	E	A I.P.S.	Sani- Coated
1 1/2" x 2"	17 3/4"	9 3/4"	3 3/4"	10"	7 1/4"	2"	\$ 37.50
1 1/2" x 2"	19 1/4"	12 1/8"	3 5/8"	11 1/8"	8 1/8"	2"	52.50
1 1/2" x 2"	22"	14 1/4"	3 3/4"	11 3/4"	8 1/2"	2"	90.00
1 1/2" x 2", 3"	24"	17"	3 3/4"	13 1/4"	8 3/4"	2", 3"	124.50
1 1/2" x 2"	21 3/8"	14 1/4"	2 3/4"	12 1/4"	2 3/4"	2"	199.50
1 1/2" x 2", 3", 4"	27 3/8"	17 1/2"	4 1/2"	14 3/4"	10 1/4"	2", 3", 4"	184.50
1 1/2" x 2", 3", 4"	30 3/4"	20 1/4"	4 3/8"	16 5/8"	12 1/8"	2", 3", 4"	291.00
1 1/2" x 2", 3"	26 1/4"	17 1/8"	3 3/8"	12 3/4"	3 3/8"	2", 3"	306.00
2" x 3", 4"	32 1/2"	23"	4 1/4"	18 1/2"	14"	2", 3", 4"	505.50

Approx. Wt. Lbs. 100—71, 200—91, 300—139, 400—188, 500—216,
600—331, 700—464, 400LT—135, 600LT—230.

Soil pipe connections available

Larger sizes for special applications available to specification.

*Recommended I. P. Sizes.

Has vertical baffle and horizontal basket baffle,
easily removed for cleaning. Baffles not attached
to cover.

DE LUXE MODEL CAST IRON GREASEPTOR
With Patented Flow Control Tee

FIG. Z-1171

Size No.	A I.P.S.	B	B'	C	D	E	J I.P.S.	Sani- Coated
100	1 1/2" x 2"	17 3/4"	9 3/4"	3 3/4"	10"	7 1/4"	2"	\$ 60.00
200	1 1/2" x 2"	19 1/4"	12 1/8"	3 5/8"	11 1/8"	8 1/8"	2"	75.00
300	1 1/2" x 2"	22"	14 1/4"	3 3/4"	11 3/4"	8 1/2"	2"	120.00
400	1 1/2" x 2", 3"	24"	17"	3 3/4"	13 1/4"	8 3/4"	2", 3"	157.50
500	1 1/2" x 2", 3", 4"	27 3/8"	17 1/2"	4 1/2"	14 3/4"	10 1/4"	2", 3", 4"	225.00

Approx. Wt. Lbs. 100—67 1/2, 200—86 1/2, 300—132, 400—178 1/2,
500—205.

Soil pipe connections available

Larger sizes for special applications available to specification.

*Recommended I. P. Sizes.

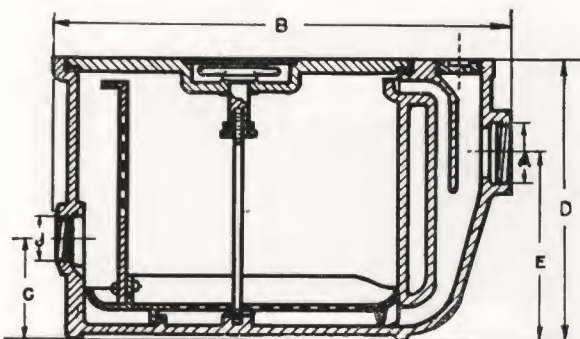
Has integral vertical baffle, horizontal basket baffle
and cover, easily removed for cleaning. Baffles are
attached to cover.

ADD FOR PORCELAIN ENAMEL FINISH FIGS. Z-1170 AND Z-1171

Size No.	Inside or Outside	Size No.	Inside and Outside
100	\$ 54.00	100	\$ 72.00
200	60.00	200	84.00
300	84.00	300	120.00
400	111.00	400	187.50
400LT	111.00	400LT	187.50
500	204.00	500	294.00
600	270.00	600	345.00
600LT	270.00	600LT	345.00
700	285.00	700	390.00

Assures free flowing drainage through pipe
lines at all times by intercepting, separating,
accumulating and recovering grease from waste
water lines.

Flow Control Tee furnished with every greaseptor;
its use guarantees foolproof operation and maxi-
mum efficiency.



Z-1170, Z-1171—C.I. Greaseptors—Dimensional Detail



FIG. Z-1174

"VGE" GREASEPTOR WITH Flow Control Tee

Size No.	*G.P.M. Rated Capacity	*Lbs. Grease Capacity	A I.P.S.	B	B'	C	D	E	J I.P.S.	V.G.E.
350—VGE	12	24	2"	25 1/2"	16 1/2"	4 1/4"	12 1/8"	9"	2"	\$124.50
450—VGE	18	36	2"	29"	19 1/2"	4 11/16"	15 1/4"	9 7/8"	2"	184.50
550—VGE	25	50	2"	33"	22 1/2"	4 5/8"	18 7/8"	12 7/8"	2"	291.00

Approx. Wt. Lbs. 350—76, 450—128, 550—171.

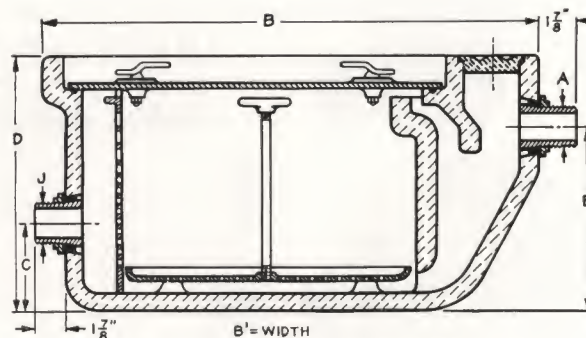
*At 90% rated average efficiency as tested in accordance with War Department Standard Specifications for Temporary Housing 8000 E, P-13, Addenda No. 2—Specifications for Mobilization Construction Equipment P. E. 620, and War Dept. Corps of Engineers Tentative Specification P. E. 620, May 27, 1944.

Made of Vitreous Glazed Earthenware. Impervious to thermal shock. Easily cleaned inside and out because of smooth surfaces; therefore thoroughly sanitary. Especially desirable for hospital and public eating facilities.

Flow Control Tee furnished with every "VGE" greaseptor—see details on page 63.



Z-1174—VGE Greaseptor.
I.P.S. Inlet and Outlet

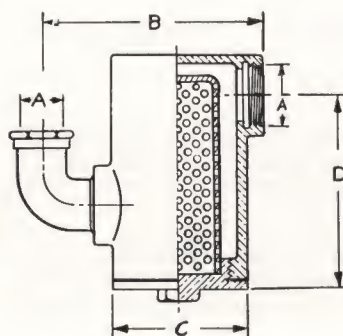


Z-1174—VGE Greaseptor. I.P.S. Inlet and Outlet

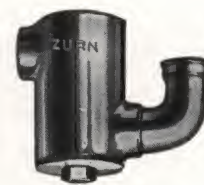
FIG. Z-1175 HAIR INTERCEPTOR

Pipe Size A	B	C	D	All Bronze Pol.	C. P.	Approx. Wt. Lbs.
1 1/4-1 1/2"	6 3/4"	3 3/4"	5 5/8"	\$36.00	\$40.00	8

For barber shops, beauty parlors, clubs, dormitories, swimming pools, etc.; for sinks and lavatories in industrial or commercial usage. Perforated brass basket, removable for easy cleaning.



Slip Joint Tubing Inlet,
I.P.S. Outlet

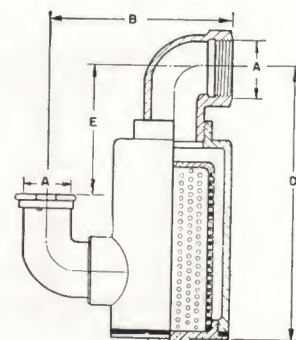


Z-1175

FIG. Z-1175A HAIR INTERCEPTOR, Adjustable Outlet

Pipe Size A	B	D	E	All Bronze Pol.	(CP)	Approx. Wt. Lbs.
1 1/4-1 1/2"	6 1/16"	9 1/2"	5 3/16"	\$36.00	\$40.00	9

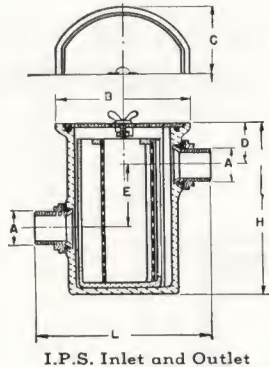
Same service as Z-1175.



Z-1175A
Slip Joint Tubing Inlet,
I.P.S. Adjustable Outlet



Z-1180, Size No. 1

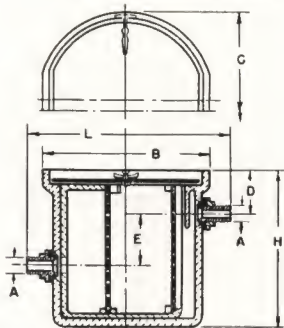
**SOLIDS INTERCEPTOR, Size No. 1****FIG. Z-1180**

Pipe Size							Capacity	
A	B	C	D	E	H	L	158.8	\$60.00
2"	8 $\frac{1}{8}$ "	8 $\frac{3}{4}$ "	2 $\frac{5}{8}$ "	4 $\frac{1}{8}$ "	11"	9 $\frac{3}{4}$ "	cu. in.	

Approx. Wt. Lbs. 2"—19.

Available in Cast Iron—Prices and Dimensions on Request.

Made of Vitreous China. Brass screen. Aluminum basket removable for easy cleaning. For hospital and dental sinks and laboratories where waste water contains plaster, metal, or abrasives.



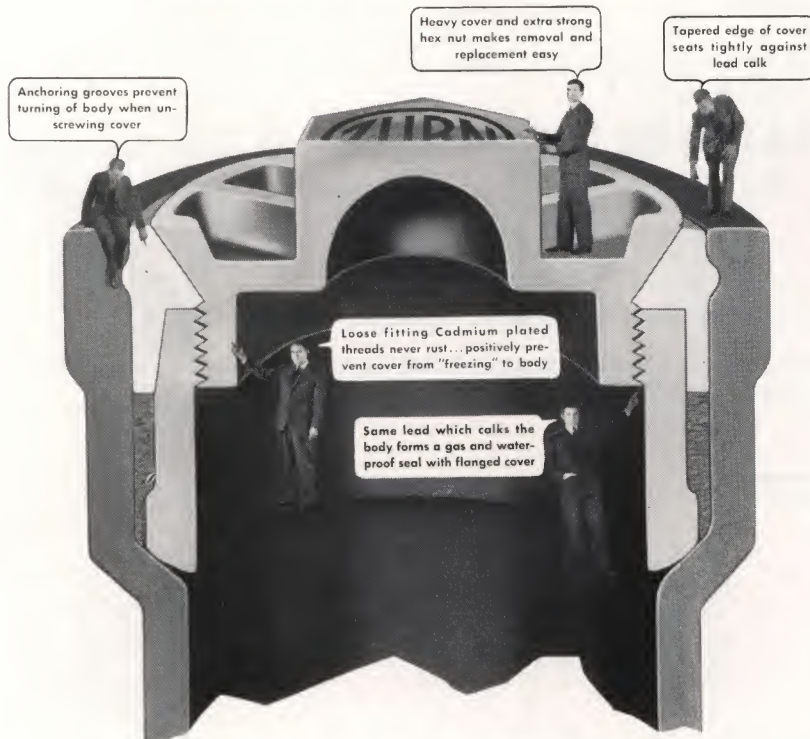
Z-1180, Size No. 2, I.P.S. Inlet and Outlet

SOLIDS INTERCEPTOR, Size No. 2**FIG. Z-1180**

Pipe Size	A	B	C	D	E	H	L	Capacity	Approx. Wt. Lbs.
2"	19 3/4"	19 3/4"	5 1/8"	5 1/8"	18 1/8"	22"	1964.5 cu. in.	\$135.00	135

Available in Cast Iron—Prices and Dimensions on Request.

Made of Vitreous Glazed Earthenware. Impervious to thermal shock. Brass screen. Aluminum basket removable for easy cleaning. Same service as Z-1180, Size No. 1.

CLEANOUTS . . . Pages 65 to 67**SUPREMO PERFECT SEAL CLEANOUTS AND CLEANOUT TEES**

Z-1300—Perfect Seal Cleanout Patented

SUPREMO PERFECT SEAL CLEANOUT FIG. Z-1300

Z-1300

Pipe Size	With Rust-proofed C. I. Cover	With Bronze Cover	All Bronze	Approx. Wt. Lbs.
2"	\$ 1.60	\$ 2.70	\$ 4.60	2
3"	2.00	3.30	5.80	4
4"	2.30	4.00	6.80	5
5"	4.80	7.60	13.20	6
6"	6.80	10.20	19.90	8
8"	13.80	19.90	25.80	13
10"	21.60	28.50	36.80	20
12"	30.80	40.60	52.40	28

For all soil pipe cleanout openings in every type of building. Provides positive gas-tight and water-tight connection, yet won't stick in removal.

We suggest the following specifications for consideration in adopting these products to meet plumbing codes written around the old style brass and iron "Trap Screw Ferrule" idea:

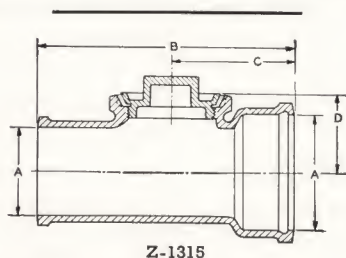
"Where a joint is made by a metal to metal contact, equivalent to a ground joint, the plug may be of extra heavy cast iron rustproofed after the threads are cut, and the contact must be made with a non-corrosive metal."

(Continued on following page)

SUPREMO PERFECT SEAL CLEANOUTS (Continued)

FIG. Z-1305 Perfect Seal Cleanout, With Flush Cover

Pipe Size	With Rust-Proofed C. I. Cover	With Bronze Cover	All Bronze	Approx. Wt. Lbs.
2"	\$ 1.60	\$ 2.70	\$ 4.60	2
3"	2.00	3.30	5.80	3
4"	2.30	4.00	6.80	5
5"	4.80	7.60	13.20	7
6"	6.80	10.20	19.90	8
8"	13.80	19.90	25.80	13
10"	21.60	28.50	36.80	20
12"	30.80	40.60	52.40	28



Z-1315

FIG. Z-1315 SUPREMO PERFECT SEAL CLEANOUT TEE WITH RAISED COVER

Pipe Size	With Rust-Proofed C. I. Plug	With Bronze Plug	Approx. Wt. Lbs.
2"	\$ 4.40	\$ 5.30	7
3"	5.20	6.40	15
4"	6.10	7.70	16
5"	10.10	14.00	22
6"	13.80	16.50	35

Z-1315

A	B	C	D
2"	10"	4 3/8"	3"
3"	12"	5 1/2"	3 1/8"
4"	12"	5 3/4"	3 1/2"
5"	13"	6 1/4"	4 1/4"
6"	14"	7 1/16"	4 3/4"



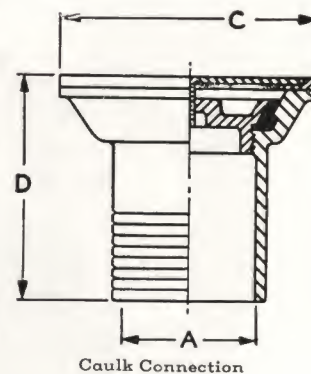
Z-1326

Z-1315, Z-1320 For all installations of cleanout tees, vertical or horizontal, in any type of building.

FIG. Z-1326 SUPREMO PERFECT SEAL FLOOR LEVEL CLEANOUT

Pipe Size	A	C	D	Polished	C. P.	Approx. Wt. Lbs.
2"	5"	8 1/4"	\$ 6.10	\$ 7.80	7	
3"	5"	8 1/4"	7.80	9.50	8	
4"	6"	8 1/4"	9.50	11.30	12	
5"	8"	8 1/4"	14.70	18.20	20	
6"	8"	8 1/4"	18.40	21.90	26	

For use in industrial plants and other buildings where cleanout openings occur in heavy traffic open areas. Adjustable top compensates for variations in floor surface.

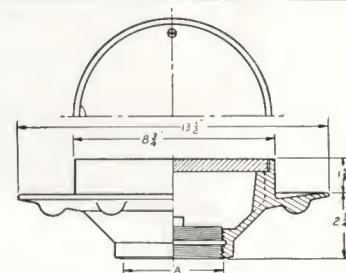


Caulk Connection

FIG. Z-1327 AREAWAY CLEANOUT

Pipe Size	Coated (DC)	Galv. (G)	All Bronze (BR)	Bronze Rim and Cover Coated (CB)	Galv. (GB)	Approx. Wt. Lbs.
2"	\$15.00	\$25.20	\$57.60	\$25.50	\$37.80	24
3"	16.50	27.00	59.20	27.00	39.60	25
4"	18.00	28.80	60.80	28.50	41.40	26
Clamping collar, add	2.30	3.60	4.80	2.30	3.60	

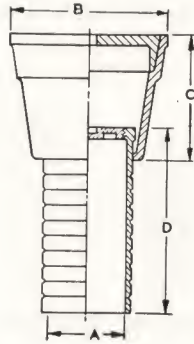
For cleanouts in open areaways or as access to horizontal drainage lines.



Z-1327



Z-1329

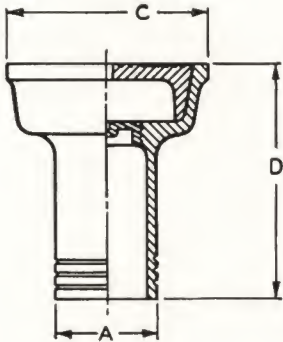


HEAVY DUTY FLOOR LEVEL CLEANOUT

FIG. Z-1329

Pipe Size	A	B	C	D	Coated (DC)	Add for Galv. Housing	Approx. Wt. Lbs.
2"		6 $\frac{3}{4}$ "	4 $\frac{3}{4}$ "	8"	\$ 8.60	\$2.30	17
3"		6 $\frac{3}{4}$ "	4 $\frac{3}{4}$ "	8"	9.60	2.30	18
4"		6 $\frac{3}{4}$ "	5 $\frac{1}{2}$ "	8"	10.70	2.30	21
5"		8 $\frac{3}{4}$ "	5 $\frac{1}{2}$ "	8"	13.80	3.50	28
6"		8 $\frac{3}{4}$ "	5 $\frac{1}{2}$ "	8"	14.40	3.50	36
Cleanout housing only							
2-3-4					6.40	2.30	
5-6					8.00	3.50	

For cleanout openings occurring in open areas and subject to heavy traffic. Adjustable top eliminates need for accuracy of floor levels.



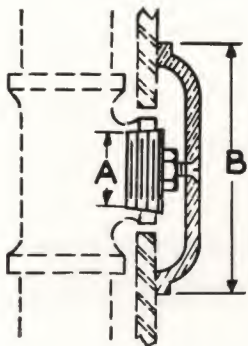
Z-1329-2

TRAFFIC CLEANOUT EXTENSION

FIG. Z-1329-2

Pipe Size	A	C	D	Cast Iron		Approx. Wt. Lbs.
				Coated (DC)	Galv. (G)	
2"		6 $\frac{3}{4}$ "	8"	\$ 5.90	\$ 8.70	15
3"		6 $\frac{3}{4}$ "	8"	7.20	10.80	16
4"		6 $\frac{3}{4}$ "	8"	7.80	11.70	18
5"		on request	8"	9.90	13.70	25
6"				11.70	17.60	30

Provides access to drain lines through factory floor. Cleanout plug protected by heavy deep flange, non-slip cover.



Z-1370

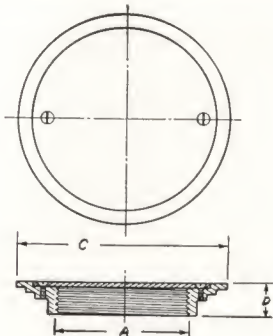
WALL ACCESS CLEANOUT

FIG. Z-1370

Pipe Size	A	B	1/4" Depth	Polished Bronze					Approx. Wt. Lbs.
				1"	2"	3"	4"	5"	
1 $\frac{1}{2}$ "		5"	\$ 5.30	\$ 8.80	\$16.30	\$17.90	\$19.20	\$20.80	4
2"		5"	5.90	9.30	16.70	18.30	19.70	21.30	5
3"		5"	8.00	10.30	17.40	18.80	20.20	21.80	6
4"		7"	12.20	12.60	18.10	19.40	20.80	22.80	8
5"		7"	17.60	17.90	26.20	28.20	30.10	33.90	11
6"		7"	20.30	20.50	30.70	33.60	35.80	37.40	15

Add for C. P.—15%
Add for W. M.—50%

Furnished with bronze cleanout plug tapped to accommodate bronze wall plate of desired depth. Fitting not furnished.



Z-1380

ACCESS CLEANOUT

FIG. Z-1380

Pipe Size	A	C	D	All Bronze		Approx. Wt. Lbs.
				Pol.	C. P.	
2"		5 $\frac{1}{2}$ "	1"	\$ 5.80	\$ 7.70	3
3"		5 $\frac{1}{2}$ "	1"	6.70	8.60	4
4"		6 $\frac{3}{4}$ "	1"	7.70	9.60	5
5"		8"	1"	9.60	11.50	6
6"		9 $\frac{1}{2}$ "	1"	11.50	13.40	8
8"		11 $\frac{1}{2}$ "	1"	14.40	16.30	12

MISCELLANEOUS . . . Pages 68 to 69

FIG. Z-1381, Z-1382 DECK PLUG—NON-SLIP

Pipe Size	A	C	D	Machine Finish	All Bronze Pol.	C. P.	Approx. Wt. Lbs.
2"		4"-4 3/4"*	1 1/4"-3 1/8"*	\$ 7.20	\$ 9.40	\$11.40	3
3"		4 3/4"-6"*	1 1/2"-3 1/8"*	11.20	13.60	16.10	4
4"		6"-7 3/8"*	1 1/2"-3 1/4"*	13.20	16.40	18.90	6
5"		9 3/8"	1 3/4"-3 1/2"*	21.60	25.20	28.60	10
6"		9 3/8"	1 3/4"-3 1/2"*	33.60	37.20	41.20	12
8"*		11"	2"	60.00	72.00	80.00	18

Provides floor cleanout where flush finish with floor level is desired. Non-slip safety top for exposed installations.

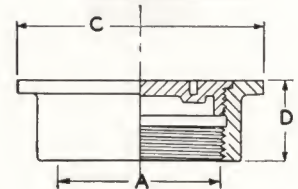
*Caulk dimensions

**Available I.P.S. only

Note: specify Z-1382 for caulk connection



Z-1382
Caulk Connection



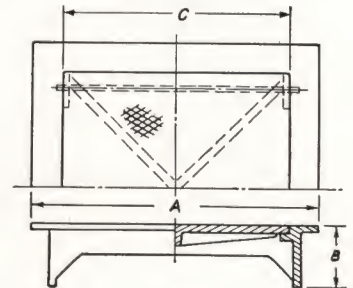
Z-1381—I.P.S. Connection

FIG. Z-1385 ACCESS BOX—HINGED COVER

A	B	C	Coated (DC)	Galv. (G)	All Bronze Pol.	C. P.	Approx. Wt. Lbs.
6x6"	1 3/4"	4"	\$1.80	\$ 3.10	\$ 6.40	\$ 8.60	3
8x8"	1 3/4"	6"	2.40	4.10	8.80	11.30	5
10x10"	1 3/4"	7"	6.60	11.20	18.00	21.50	7
12x12"	1 3/4"	10"	9.00	15.10	24.00	29.00	11

Non-slip carborundum surface—same price as chrome (C.P.)

Floor or Wall access to valves, pipe-lines, shut-off cocks, hose connections.



Z-1385

FIG. Z-1385-1 ACCESS BOX—SECURED COVER

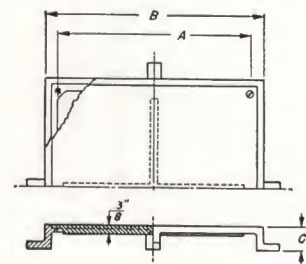
A	B	C	Coated (DC)	Galv. (G)	All Bronze Pol.	C. P.	Approx. Wt. Lbs.
6x6"	7x7"	1"	\$1.80	\$ 3.10	\$ 5.40	\$ 7.60	3
8x8"	9x9"	1"	2.40	4.10	7.80	10.30	5
10x10"	11x11"	1"	5.80	10.20	16.20	19.70	6 1/2
12x12"	13x13"	1"	8.20	14.10	21.10	26.10	10

Non-slip carborundum surface—same price as chrome (C.P.)

Floor or Wall access to valves, pipe-lines, shut-off cocks, hose connections.

Anchorage Lugs assure secure installation.

Full size opening for Handhole.

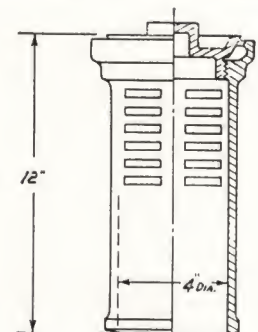


Z-1385-1

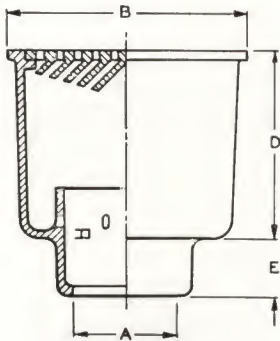
FIG. Z-1386 ACCESS BOX AND VENT

Pipe Size	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
4"	\$8.40	\$14.10	17

Relief vent on drainage system. Will prevent entry of sticks, etc., without retarding access of ample free air. Removable access cleanout.



Z-1386



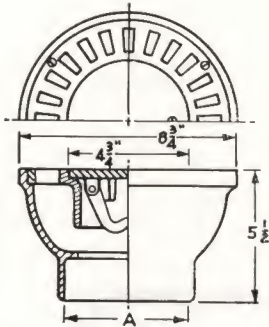
Z-1386A—Caulk Connection

VENT BOX

FIG. Z-1386A

Pipe Size	B	D	E	Coated (DC)	Galv. (G)	Bronze Grate	Approx. Wt. Lbs.
A							
4"	6 $\frac{3}{4}$ " Sq.	4"	2"	\$ 7.50	\$13.50	\$22.50	25

Unique cover design prevents insertion of large objects. Provides outside air to plumbing system or building interior.



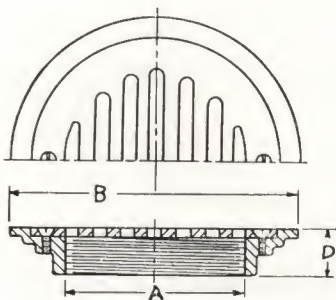
Z-1387—Caulk Connection

VENT BOX

FIG. Z-1387

Pipe Size	Coated (DC)	Galv. (G)	Approx. Wt. Lbs.
A			
4"	\$7.50	\$13.50	8

Consists of outside vent ring and secured center cleanout, removable only with special tool. Removable center plate allows cleaning. Same service as Z-1386A.



Z-1388—I.P.S. Connection

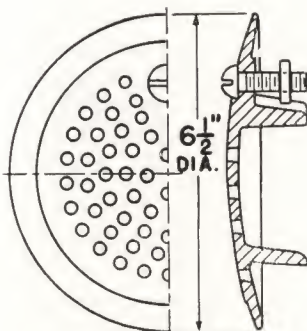
FRESH AIR INLET

FIG. Z-1388

Pipe Size	B	D	Pol.	All Bronze	C. P.	Approx. Wt. Lbs.
A						
3"	5 $\frac{1}{2}$ "	1"	\$ 9.60		\$12.80	5
4"	6 $\frac{3}{4}$ "	1"	11.50		14.70	6
*4"	8"	1 $\frac{3}{4}$ "	16.00		20.80	10
5"	8"	1"	20.80		25.00	15
6"	9 $\frac{1}{2}$ "	1"	23.00		30.70	18

*Denotes New York State Specification

For boiler rooms, garages, laundries.



Z-1389

FRESH AIR INLET

FIG. Z-1389

Pipe Size	Pol.	All Bronze	C. P.	Approx. Wt. Lbs.
A				
4"	\$4.80		\$8.00	2

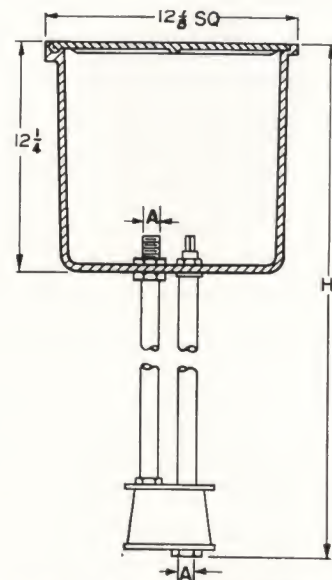
Provides simple and secure means for covering outside vent pipes.

HYDRANTS . . . Pages 70 to 75

FIG. Z-1392 PARK SPRINKLING VALVE AND CONTROL BOX, Frost Proof

Pipe Size A	H	Iron Box and Top		Iron Box and Bronze Top		Approx. Wt. Lbs.
		I. S.	B. S.	I. S.	B. S.	
3/4"	36"	\$53.20	\$70.20	\$66.20	\$ 82.20	82
3/4"	48"	55.70	78.50	67.70	90.50	86
3/4"	60"	56.20	88.20	69.20	100.20	90
1"	36"	65.60	88.80	79.10	100.80	85
1"	48"	67.10	98.60	80.60	110.60	89
1"	60"	68.60	108.30	82.10	120.30	93

For school grounds, public parks, golf courses, swimming pools, and other locations where large control boxes are desirable for housing additional valves and connections for drinking fountains or other fixtures. Non-freezing valve, removable for repair without digging up connections.



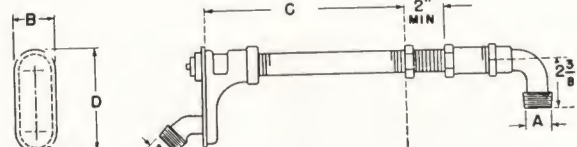
Z-1392—I.P.S. Inlet, Hose Connection

FIG. Z-1395 WALL HYDRANT

A 3/4" 1"	B 2" 2 1/2"			C as spec. as spec.			D 5 1/2" 5 1/2"
A—3/4" Size—Polished bronze face							
Wall Thickness	Galv. Casing	Brass Casing	Approx. Wt. Lbs.	Wall Thickness	Galv. Casing	Brass Casing	Approx. Wt. Lbs.
9"	\$16.50	\$19.70	7	24"	\$24.00	\$28.60	11 1/2
11"	17.50	20.90	7 1/2	26"	25.00	29.80	12
13"	18.50	22.10	8	28"	26.00	31.00	12 1/2
15"	19.50	23.30	9	30"	27.00	32.20	13
16"	20.00	23.90	9 1/2	32"	28.00	33.40	13 1/2
18"	21.00	25.00	10	34"	29.00	35.60	14
20"	22.00	26.20	10 1/2	36"	30.00	36.80	14 1/2
22"	23.00	27.40	11				
A—1" Size—Polished bronze face							
Wall Thickness	Galv. Casing	Brass Casing	Approx. Wt. Lbs.	Wall Thickness	Galv. Casing	Brass Casing	Approx. Wt. Lbs.
9"	\$22.40	\$25.00	9	24"	\$31.40	\$35.50	13 1/2
11"	23.60	26.40	9 1/2	26"	32.60	36.90	14
13"	24.80	27.80	10	28"	33.80	38.30	14 1/2
15"	26.00	29.20	11	30"	35.00	39.70	15
16"	26.60	29.90	11 1/2	32"	36.20	41.10	15 1/2
18"	27.80	31.30	12	34"	37.40	42.50	16
20"	29.00	32.70	12 1/2	36"	38.60	43.90	16 1/2
22"	30.20	34.10	13				
Chrome plated face add			1.90				
White metal face add			2.90				



Z-1395



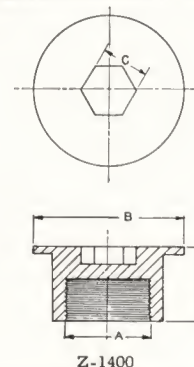
I.P.S. Inlet, Hose Connection

For outside hose connection to prevent freezing or tampering with valve. For public buildings, institutions, etc. Valve removable for repair without dismantling the connections.

FIG. Z-1400 CAP CLOSURE

Type "S" Type "W"	Pipe Size		C	D	All Bronze		Approx. Wt. Lbs.
	A	B			Pol.	C. P.	
Type "S"	3/8"	1 1/4"	3/8"	7/8"	\$1.10	\$1.30	1 1/2
Type "W"	1 1/2"	3"	1"	1 1/2"	2.70	3.20	1 1/2

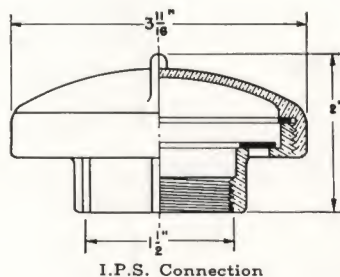
For use where water supply connections for future use are desired. Counter-sunk head on face for easy removal.



Z-1400



Z-1405



SYPHON PREVENTER

FIG. Z-1405

Complete, Each \$16.00

Approx. Wt. Lbs. 6.

For emergency use on existing installations where siphonic action has developed on waste or vent lines. A simple vent relief which automatically releases entrained air in any vent line or chamber such as old type grease traps, etc.

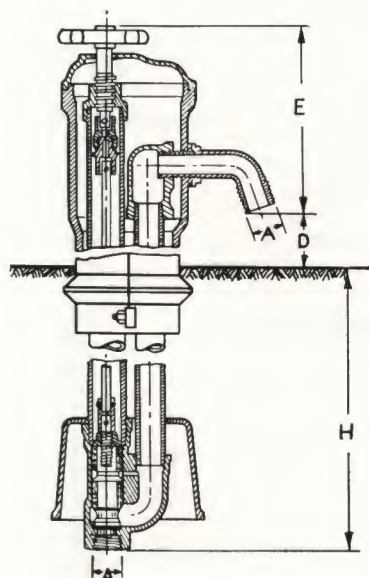
Z-1480—I.P.S. Inlet,
Hose ConnectionCOMPRESSION VALVE DRY PIPE HYDRANT,
Full-Covered Casing

FIG. Z-1480

Depth H	3/4"	Approx. Wt. Lbs.	1"	Approx. Wt. Lbs.	Pipe Size A	D	E
2'	\$21.60	30	\$40.50	35	3/4"	18"	8 5/16"
3'	22.50	33	41.70	38	1"	18"	8 3/4"
4'	23.40	37	42.90	42			
5'	24.30	40	44.10	45			
6'	25.20	47	45.30	52			

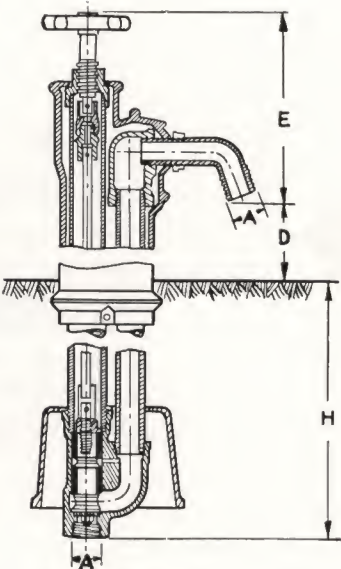
Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



FIG. Z-1481 COMPRESSION VALVE DRY PIPE HYDRANT,
Semi-Covered Casing

Depth H	3/4"	Approx. Wt. Lbs.	1"	Approx. Wt. Lbs.	Pipe Size A	D	E
2'	\$19.50	28	\$31.90	33	3/4"	18"	7"
3'	20.40	31	33.10	36	1"	18"	7 1/4"
4'	21.30	34	34.30	39			
5'	22.20	37	35.50	42			
6'	23.10	45	36.70	50			

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



I.P.S. Inlet, Hose Connection



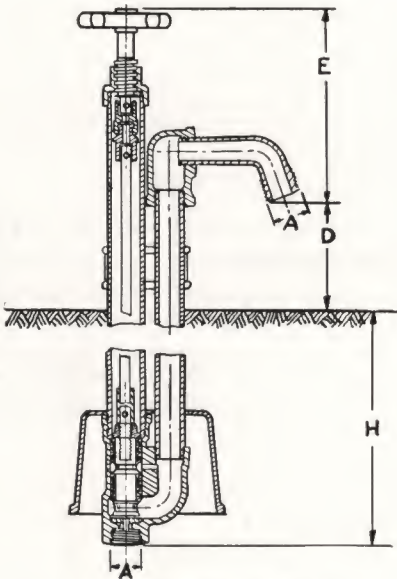
Z-1481

FIG. Z-1482 COMPRESSION VALVE DRY PIPE HYDRANT, Exposed Casing

Depth H	3/4"	Approx. Wt. Lbs.	1"	Approx. Wt. Lbs.	1 1/4"	Approx. Wt. Lbs.	1 1/2"	Approx. Wt. Lbs.
2'	\$15.00	17	\$26.60	22	\$51.00	25	\$63.40	26
3'	15.90	21	27.80	26	52.60	29	65.30	30
4'	16.80	25	29.00	30	54.20	33	67.20	34
5'	17.70	28	30.20	33	55.80	36	69.10	37
6'	18.60	32	31.40	37	57.40	40	71.00	41

Pipe Size A	D	E
3/4"	18"	7"
1"	18"	7 1/4"
1 1/4"	18"	7 3/4"
1 1/2"	18"	7 7/8"

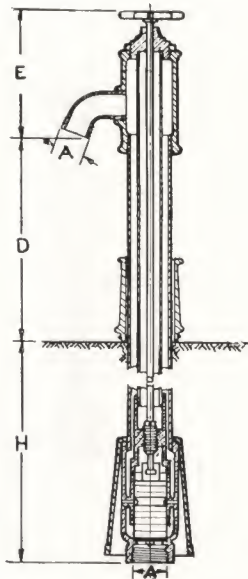
Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



I.P.S. Inlet, Hose Connection



Z-1482



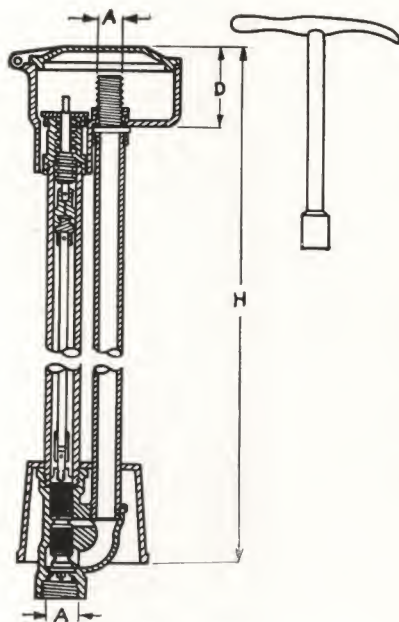
Z-1483—I.P.S. Inlet,
Hose Connection

COMPRESSION VALVE HYDRANT

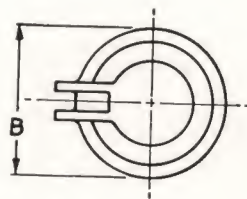
FIG. Z-1483

Depth	Heavy Duty		Approx.		Pipe Size		E	H
	1½"	2"	Wt. Lbs.	Wt. Lbs.	A	D		
2'	\$70.50	\$110.10	38	57	1½"	18"	6½"	as spec.
3'	73.90	116.50	42	62	2"	18"	7½"	as spec.
4'	77.30	122.90	46	67				
5'	80.70	129.30	50	72				
6'	84.10	135.70	54	77				
8'	87.50	142.10	58	82				
10'	90.90	148.50	62	87				

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



I.P.S. Inlet, Hose Connection



Z-1490

COMPRESSION VALVE DRY PIPE STREET WASHER, Round Head FIG. Z-1490

Depth	Approx.		Pipe Size		D	H
	¾"	1"	A	B		
2'	\$15.00	\$26.60	¾"	4⅝"	2⅛"	as spec.
3'	15.90	27.80	1¼"	7½"	2⅝"	as spec.
4'	16.80	29.00				
5'	17.70	30.20				
6'	18.60	31.40				

I. P. ¾" Approx. Wt. Lbs. 2'—12, 3'—16, 4'—20, 5'—24, 6'—28.

I. P. 1" Approx. Wt. Lbs. 2'—15, 3'—19, 4'—23, 5'—27, 6'—31.

I. P. 1¼" Approx. Wt. Lbs. 2'—16, 3'—20, 4'—24, 5'—28, 6'—32.

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



FIG. Z-1491 COMPRESSION VALVE DRY PIPE STREET WASHER,
Square Head

Depth	Pipe Size			A	B	B'	D	H
	3/4"	1"	1 1/4"					
2'	\$15.00	\$26.60	\$51.00	3/4"	5 1/2"	4 1/16"	2 1/2"	as spec.
3'	15.90	27.80	52.60	1 1/4"		on request		
4'	16.80	29.00	54.20					
5'	17.70	30.20	55.80					
6'	18.60	31.40	57.40					

I. P. 3/4" Approx. Wt. Lbs. 2'—12, 3'—16, 4'—20, 5'—24, 6'—28.
I. P. 1" Approx. Wt. Lbs. 2'—15, 3'—19, 4'—23, 5'—27, 6'—31.
I. P. 1 1/4" Approx. Wt. Lbs. 2'—16, 3'—20, 4'—24, 5'—28, 6'—32.

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.

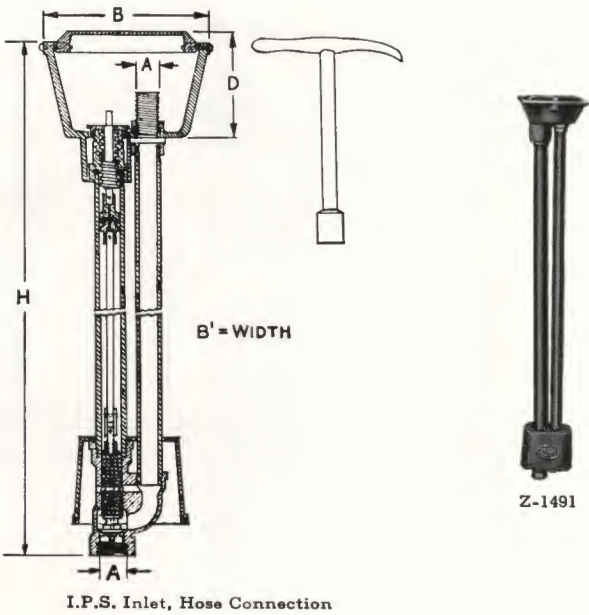
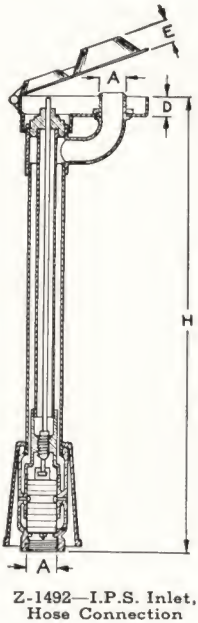
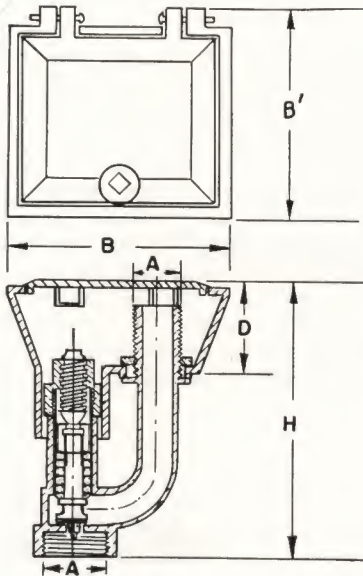


FIG. Z-1492 COMPRESSION VALVE STREET WASHER

Depth	Heavy Duty		Approx. Wt. Lbs.	Pipe Size	A	D	E	H
	1 1/2"	2"						
2'	\$70.50	\$110.10	42	1 1/2"	1 1/8"	1 5/32"	as spec.	
3'	73.90	116.50	47	2"	1 1/4"	1 5/16"	as spec.	
4'	77.30	122.90	52					
5'	80.70	129.30	57					
6'	84.10	135.70	62					
8'	87.50	142.10	67					
10'	90.90	148.50	72					

Non-freezing valve, removable for repair without digging up connections. Valve construction assures long life.



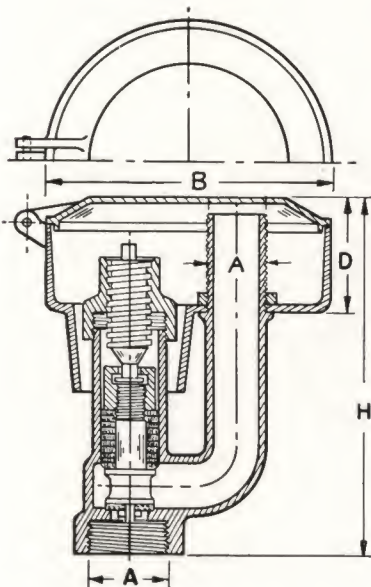


Z-1493—I.P.S. Inlet,
Hose Connection

HOSE BOX—SHORT PATTERN STREET WASHER, Square Head FIG. Z-1493

Pipe Size	A	B	B'	D	H	$\frac{3}{4}"$	1"	Approx. Wt. Lbs.
$\frac{3}{4}$ -1"		5 $\frac{1}{2}"$	4 $\frac{11}{16}"$	2 $\frac{1}{2}"$	6 $\frac{3}{16}"$	\$12.00	\$16.00	7
Add for locking device						2.50	2.50	

Non-freezing valve, removable for repair without digging up connections.
Valve construction assures long life.



Z-1494—I.P.S. Inlet,
Hose Connection

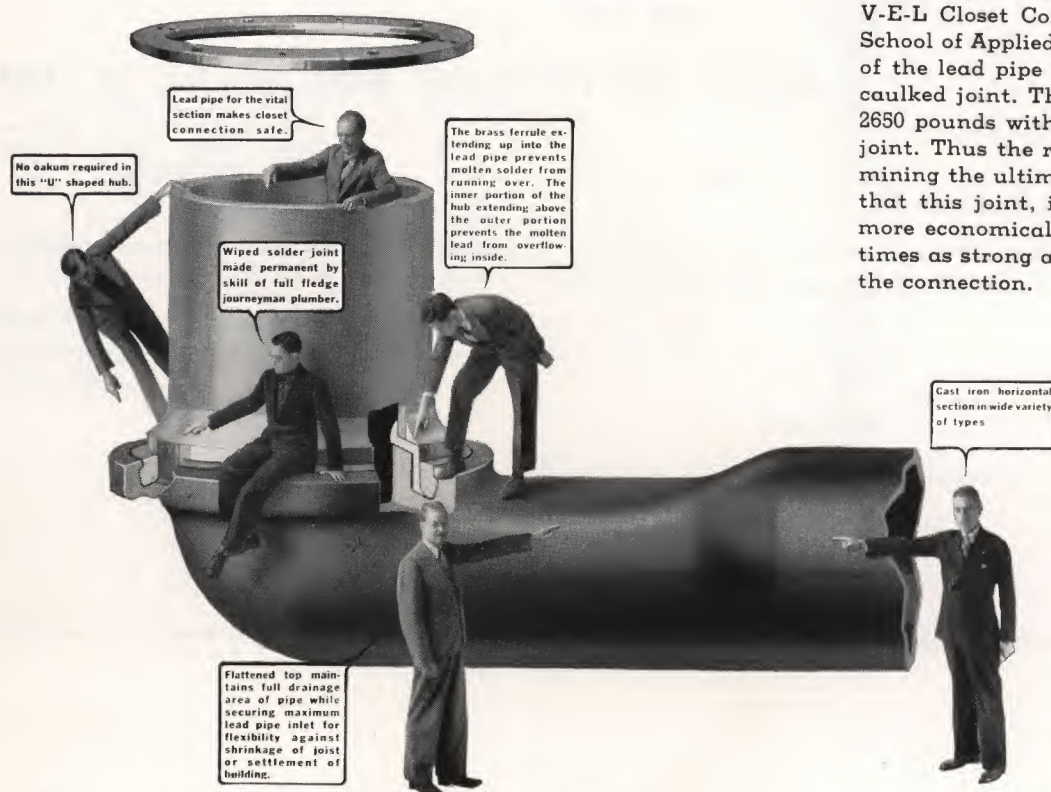
HOSE BOX—SHORT PATTERN STREET WASHER, Round Head FIG. Z-1494

Pipe Size	A	B	D	H	$\frac{3}{4}"$	1"	Approx. Wt. Lbs.
$\frac{3}{4}$ -1"		4 $\frac{5}{8}"$	2 $\frac{1}{8}"$	5 $\frac{11}{16}"$	\$12.00	\$16.00	6
Add for locking device					2.50	2.50	

Non-freezing valve, removable for repair without digging up connections.
Valve construction assures long life.

ZURN V-E-L CLOSET CONNECTIONS

V-E-L MEANS VITAL ELEMENT LEAD—A LEAD PIPE VITAL SECTION ON A CAST IRON CONNECTION



Z-2036—V-E-L Closet Connection

The test specimen illustrated below consisting of a piece of eight pound lead pipe and a wiped and caulked joint exactly as employed in the Zurn V-E-L Closet Connection was tested by the Case School of Applied Science, to compare the strength of the lead pipe to the strength of the wiped and caulked joint. The pipe failed at a pulling load of 2650 pounds with no deformation or effect on the joint. Thus the results of the test made for determining the ultimate strength of the joint indicate that this joint, in addition to being simpler and more economical to make, is approximately three times as strong as the lead pipe which it joins to the connection.



Test Specimen
(See Above)

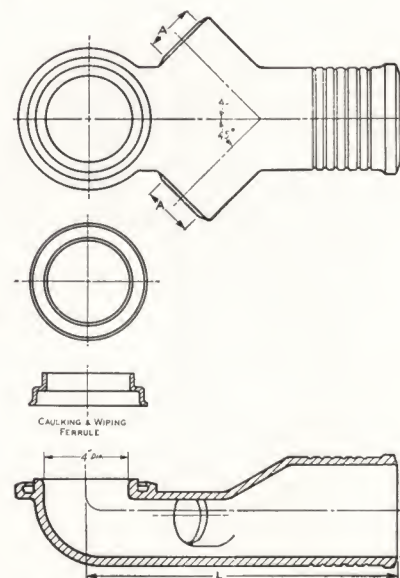
Flexible lead inlet on cast iron section makes closet connection permanently gas-tight and water-tight. Brass ferrule extending up into lead pipe prevents molten solder from running over. Inner portion of the hub extending above the outer portion prevents molten lead from overflowing inside. Flattened top of horizontal section maintains full drainage area of pipe while securing maximum lead pipe inlet for flexibility against shrinkage of joist or settlement of building.

FIG. Z-2036 V-E-L CLOSET BEND, Plain

Pipe Size	Length	Coated (DC)	Approx. Wt. Lbs.
3"	16"	\$8.10	15
4"	16"	8.10	17

FIG. Z-2046 V-E-L CLOSET BEND, Two 45° Tappings

Pipe Size	I. P. S. Tap	L	Coated (DC)	Approx. Wt. Lbs.
B	A			
3"	1½"	16"	\$9.30	22
4"	1½"	16"	9.30	26



Z-2046—Lead Pipe Inlet,
Soil Pipe Outlet



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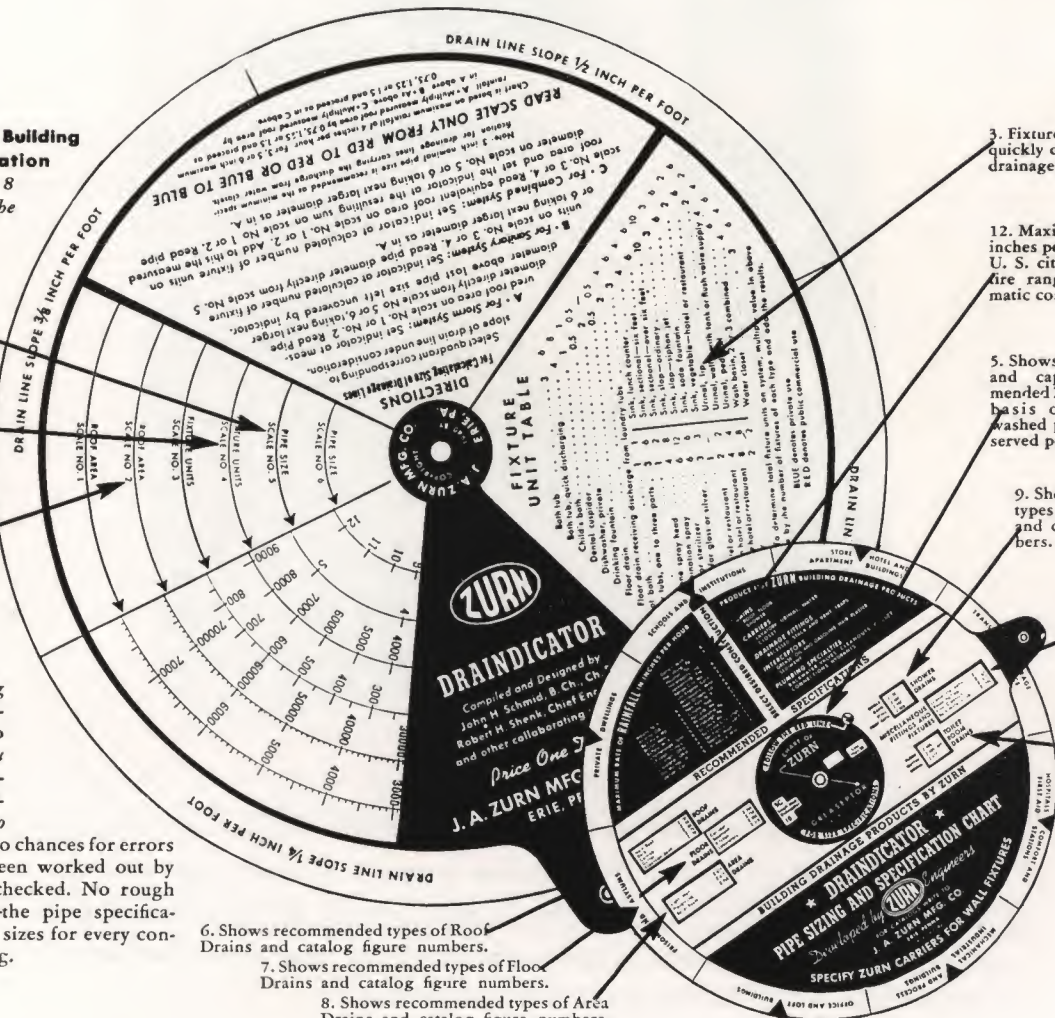
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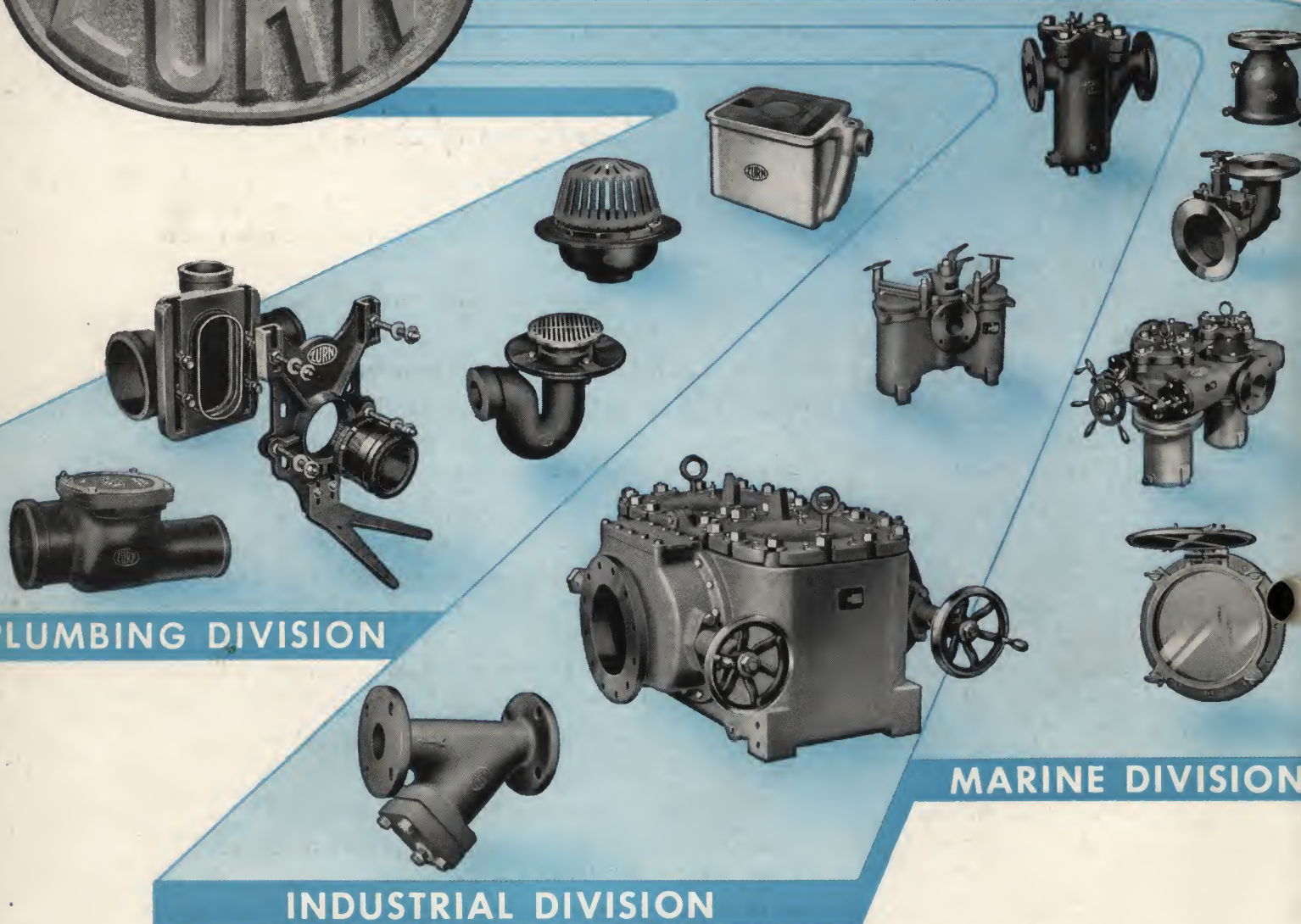
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